RGYC COURSE BOAT BOOKS

Contents

1 GPS Setting and Way Point Manager

GPS Setup

Make sure these settings are correct before leaving the Beach

• Units	Distance and Speed	nm, kt, m
• Time	Time Zone	automatic
	Time Format	24 hour
	Daylight Savings	
• Heading	Display	Numeric Degrees
	North Reference	Magnetic
	Go To Line	Bearing
• Position Format	Position Format	hddd°mm,mmm
	Map Datum	WGS84

GPS - Clear Previous Way Points

This is to prevent accidently using last week's waypoints.

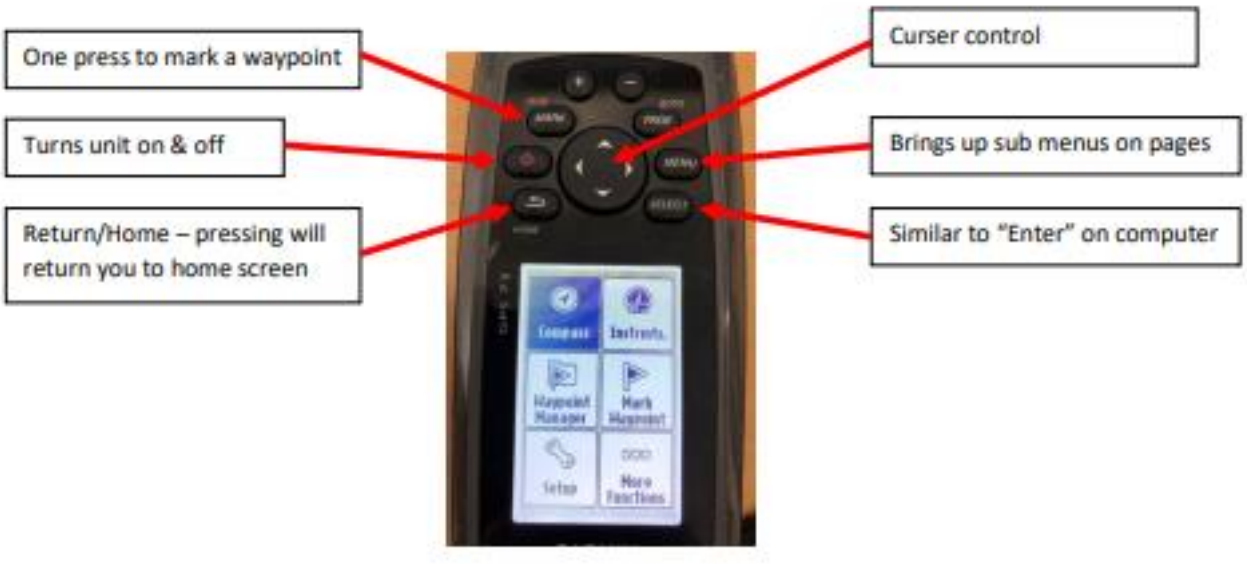
- Select Waypoint Manager
- Press the menu button
- Select Delete or Delete All
- Keep pressing select to complete the process

2 Laying a Club Mark using the GPS

Using the Garmin GPS 73

Note: RGYC also uses the Buoy Zone App to lay courses, refer to RGYC Buoy Zone manual

This is the home screen which will appear when you turn the unit on. Key buttons you will use are;



Discuss with the RO the courses to be laid, confirm;

- Who's laying the pin,
- How long is the start line to be
- Course Windward / leeward or triangle and windward length. If it's a triangle go over the table on the second last page

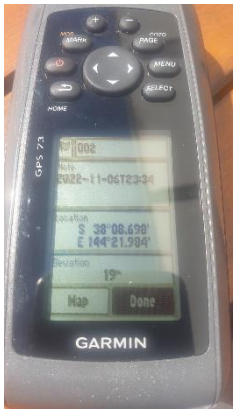
1, **Set a reference point (waypoint)**

The are 2 ways to set a waypoint. If you're alongside the Start Boat (RVC) Ping the start boat position. If you're along way from the RCV, the RO will give you the RCV's GPS co-ordinates for you to enter, saving you the time to drive to the RCV and back.

Both these methods can be practiced at the club before you go out on the water and is very worth while.

Ping a Position

- Press the “Mark” button briefly. See above
- Press “Select”
- Press “Select” until you get back to the HOME screen



2, Select a reference point (waypoint)

From the **“HOME SCREEN”,** use the down arrow **to select “Waypoint Manager” then press “Select”**

- Your reference waypoint will appear, usually 001 (this is why it’s important to delete all previous waypoints at the start of the day).

- Press “Select” to select the correct reference point.
- Then Press “Select” again.

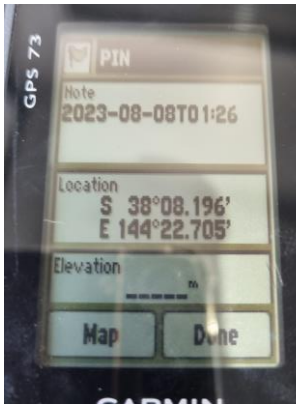
The GPS should tell you, you have arrived it you haven't moved from where you pinged the RCV, Press "Select" again.

Entering GPS Coordinates

This method is useful as it can save a lot time driving to the RCV pinging the boat and driving back, although entering coordinates into a GPS in rough water is not easy. It's best to practice this before leaving the club.

From the home page select "Mark Waypoint"

An **Optional step** is to rename the waypoint by moving the cursor to the screen and pressing "Select" then editing the name by using the cursor and select.



The next step is to move the cursor to "**Location**" and enter the coordinates.

Use the following to go to the waypoint just created.

Press the **Return / Home** button to scroll through to your preferred page for Bearing Distance and Heading, On the left below is best used to go to a known destination eg CB6.

On the right below is the one best for laying marks from a reference way point.

- The Bearing is the direction to the **reference waypoint**, it should be 180° different to your Heading
- **"Dist to Destination"** is the distance from the **reference waypoint,** it is initially in metres then changes to NM after 200 m.
- Heading is the direction the GPS is pointed.
- So if the Heading is 0° the Bearing on the GPS should be 180° from the **reference waypoint**
- The course to be laid is to have a heading of 0° at 0.6 NM. You are in the correct location when the Dist to Dest is 0.6 and your Bearing to your **reference waypoint** is 180°

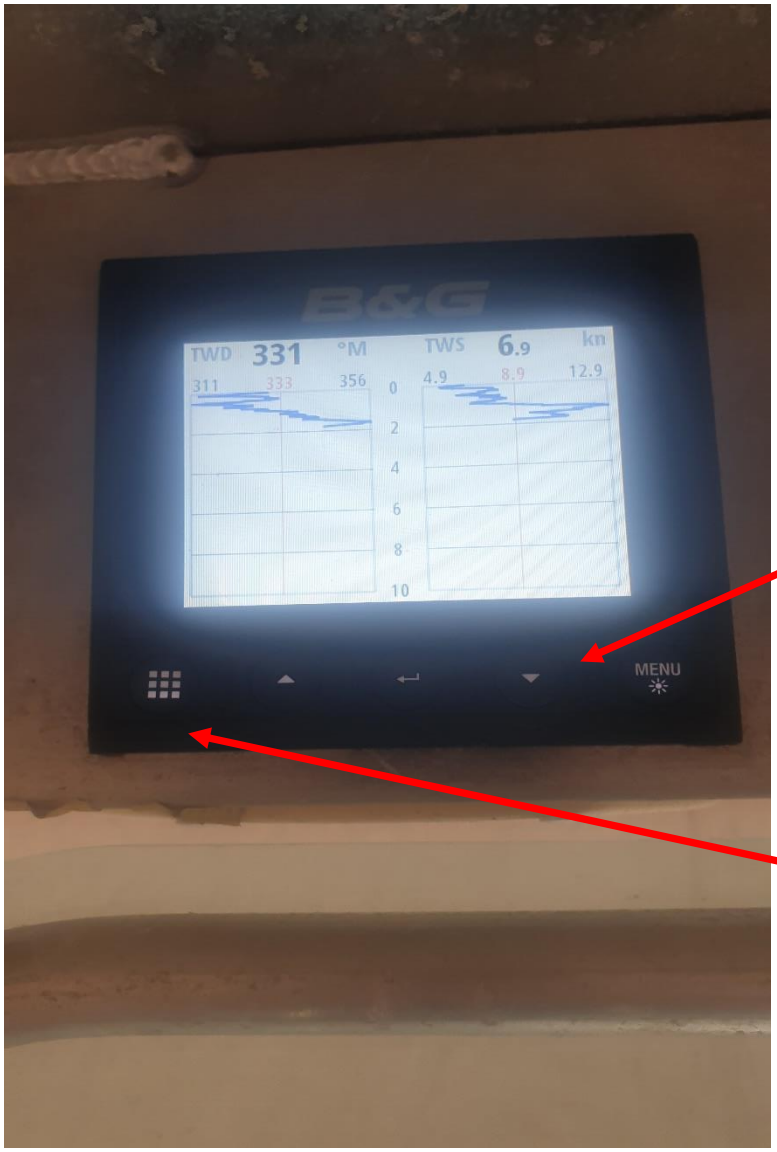
Please Note in the above example if the Bearing on the GPS is less than 180°, turn to starboard. if the Bearing on the GPS is more than 180°, turn to Port. Do it slowly GPS systems lag by a few seconds.

3 RG 10, 11 and 12 Engine Display Cluster

Turn the ignition on, press the set button to get the display that shows Fuel, RPM, Speed, Trim and Temp

4 RG 10, 11 and 12 Wind Instrument

The black numbers at the top of the screen are the instant values. The red numbers are the average values for that time frame



Push this button to change the time frame, 1, 5, 10 and 30 min, 5 is preferred

If the wind instrument is not on this screen push this button until you get there.

5 Radios

Every time you put the radio handset back make sure you're on the correct channel

The 2 middle buttons change the channels

6 Course Boat Equipment Checklist

At a minimum, Course Boats should be at least 6 metre hard hulls capable of operating in 2-3 metres seas. Suggested minimum power requirements would be 90HP, preferably greater, depending on the boat size. The boat should be capable of carrying 3 crew (including driver) and deploying a minimum of 4 course marks (buoys) and associated ground tackle plus carry 2 sets of spare tackle. It should be capable of anchoring for an extended period if required. A canopy or bimini for crew protection would be advantageous.

Boat Name: **Club:**	
Item	
Standard Safety Equipment:	**Check**
Life jackets - Check number	
Fire Extinguisher	
Torch	
Anchor & Chain – anchor must be capable of holding the boat in 25 knot winds and 2.5m seas	
Bailer	
Bilge Pump functional	
Flares – checked within the “use by” date	
Boat Equipment:	
Tool Kit containing: Bolt cutters & Knife – Grab Bag Pliers, Screwdrivers, Shackle Key Duct tape / Cable ties Red / White crew safe tape	
First Aid Kit Blanket or Thermal Blanket	
Fuel – check tanks full	
Fixed VHF Radio - Check operation and frequencies	
GPS system – Check operation	
Boat Hooks	
Spare Buoyancy Vest	
Tow Lines	

Race Management Equipment:	
Marks & Tackle	
Spare anchor & lines	
Flag supports minimum 2 and staffs – check flag fit	
Full set of flags to include: A, C, H, L, M, N, S, V, Red, Green and Blue	
Sound signal Horn– check loudness	
Backup sound horn/whistle	
Change of Course – Red, Green, Plus , Minus	
White board & markers	
Compass – Fixed & Hand Bearing	
Wind speed indicator	
Wind direction equipment	
Binoculars	
Voice recorder & spare batteries	
Documentation:	
Clipboard – Pens, Pencils, Paper	
Course sheet and compass angles	
Water	
Sun screen	

The Organising Authority will provide:

Documentation:	
Course diagrams and compass angles	
Set(s) of sailing Instructions	
Notice of Race	
Mark Rounding sheets	
Finish sheets	
Additional water	

Suitable marks will be sourced from contributing clubs. Coordination and allocation of course marks/colours will be undertaken by the Organising Authority. All marks must be a minimum of 1200mm x 400mm and with ground tackle be capable of being deployed in 25 knots without drifting (35 knots on kite course).

The Organising Authority will notify the contributing clubs of the course type they are being requested to resource.

Mark requirements	
Refer to SI's and confirm with RO	
There is usually a battery blower sent out on course, confirm which boat has it in case a mark deflates.	
Tackle	
The Average depth of Corio Bay is about 7 m, therefore DO NOT OUT LESS THAN 18m long	
Make sure you have an additional weight for every cylinder or pencil mark	
In bigger winds cones may need an additional weight	
Make sure you have an additional spare tackle	
Radio	
Confirm the Sign and OFF VHF Channel	
Confirm the Course VHF Channel	

7 Getting Boats OFF and ON Pontoons

Getting boats Off and On the pontoons is not difficult, it just requires a bit of practice.

Getting Off.

- Crew on boat
- Motor trim fully Down
- Rev the motor so water is washing up under the boat, the aim is to break the seal between the boat and the pontoon. Ask crew to sit on the back of the boat. May be bounce up and down.
- This should be enough for the boat to move. If not.
- NEUTRAL THE CREW WILL NEED TO GET OFF THE BOAT AND ROCK It FROM SIDE TO SIDE WHILE at FULL THROTTLE IN REVERSE
- Once the boat starts to move go back NEUTRAL, make sure the boat is not moving (might need a bit of forward to make it stop) get the crew on board.
- Once the Crew is back on board slowly increase Rev throttle so the boat slides off
- When the boat is about half off it should continue to slide go Neutral and turn the wheel in the desired direction.

Getting On.

- Check wind direction and make allowances
- Make sure NO One is approaching the berth
- Approach the Pontoon at minimum speed
- Just before touching the pontoon make sure the motor is straight, a bit of Rev to further slow the boat.
- If the boat is not in line, back out and have another go
- Once the boat is in line with vee and in contact with the pontoon, quickly check the motor is straight
- Get the crew to stand at back of the boat, so they can tell you when to stop, ideally with the leading edge of the motor 300 mm from the pontoon.
- Power up and Don't back off until the crew tell you to stop

8 Anchoring

The average depth of Corio Bay is 7m, therefore about 20 m of rode is the minimum that should be about 25 m

On RG10, RG 11 and RG12.

- The first transition from Chain to rope is at 14 m
- There is a cable tie on the rope at 25m

ON STUBBS AND SOOS

- The anchor must be over wound going up, if it's under wound the anchor does not drop away when lowering and the chain will jam.

- The transition cumulative lengths are on a diagram in the boat.

9 Mark Laying and Recovery

Streaming Marks

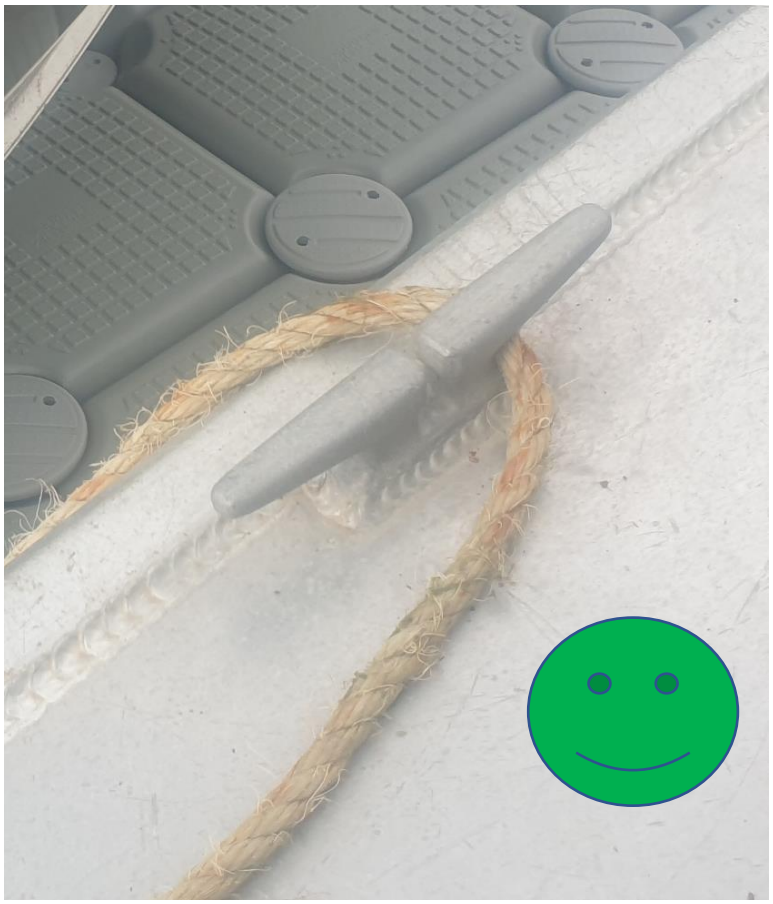
Tell the driver all the line is out

Hold the anchor here so your hands are clear and the boat takes the load

Recovering Marks

- Done well this is a relatively easy task, done badly it's hard. It requires team work between the driver and the crew.
- Approach the mark from downwind at between 3 and 4 knots so the wind and waves don't put you off your line.
- Agree which side of the boat is going to be the recovery side, port is better.
- Aim to hit the mark that side of center of the boat,
- Don't be afraid to say "let's go around again" if the first approach is out.
- If you're doing a port side recovery, once you've hit the mark, turn the wheel to starboard about 10 Degrees and PUT THE BOAT IN TO NEUTRAL.
- Pull the mark on board,
- The aim is for the boat to be slowly driven up the rode so at first the crew just pulls in the slack, the crew has to tell the driver the rode direction, usually to port.
- If the anchor does not come up HOLD the ROPE around a turnbuckle NEVER THE CHAIN AND ONLY HALF A TURN, DO NOT TIE IT OFF.
- Gently drive off so the anchor breaks out. Pull the anchor in, leave the mud in the water.
- Repack the anchor in the box.
- Undo the plug on the mark to let the air out.

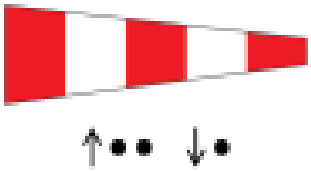
Breaking Anchors out of Mud



RACE SIGNALS

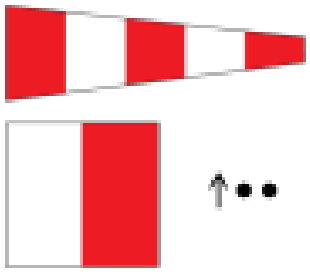
The meanings of visual and sound signals are stated below. An arrow pointing up or down (↑ ↓) means that a visual signal is displayed or removed. A dot (•) means a sound; five short dashes (– – – – –) mean repetitive sounds; a long dash (—) means a long sound. When a visual signal is displayed over a class flag, fleet flag, event flag or race area flag, the signal applies only to that class, fleet, event or race area.

Postponement Signals



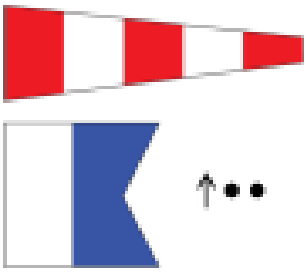
↑•• ↓•

AP Races not started are *postponed*. The warning signal will be made 1 minute after removal unless at that time the race is *postponed* again or *abandoned*.



↑••

AP over H Races not started are *postponed*. Further signals ashore.

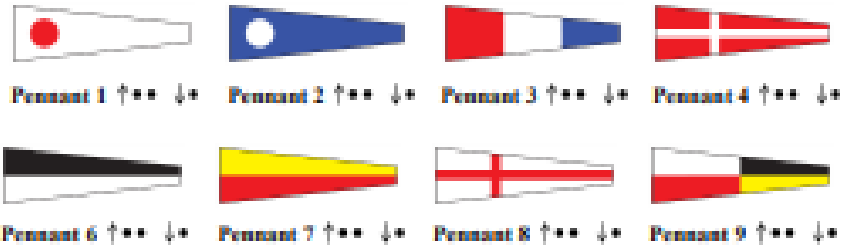


↑••

AP over A Races not started are *postponed*. No more racing today.

AP over a Numeral Pennant 1–9

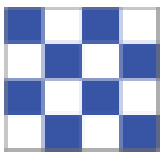
Postponement of 1-9 hours from the scheduled starting time.



Pennant 1 ↑•• ↓• **Pennant 2** ↑•• ↓• **Pennant 3** ↑•• ↓• **Pennant 4** ↑•• ↓•

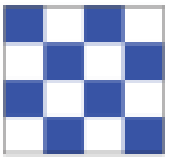
Pennant 5 ↑•• ↓• **Pennant 6** ↑•• ↓• **Pennant 7** ↑•• ↓• **Pennant 8** ↑•• ↓• **Pennant 9** ↑•• ↓•

Abandonment Signals



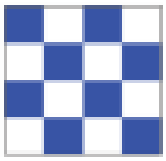
↑••• ↓•

N All races that have started are *abandoned*. Return to the starting area. The warning signal will be made 1 minute after removal unless at that time the race is *abandoned* again or *postponed*.



↑•••

N over H All races are *abandoned*. Further signals ashore.



↑•••

N over A All races are *abandoned*. No more racing today.

Safety

↑—

V Monitor communication channel for safety instructions (see rule 37).

Preparatory Signals

↑● ↓—

P Preparatory signal.

↑● ↓—

I Rule 30.1 is in effect.

↑● ↓—

Z Rule 30.2 is in effect.

↑● ↓—

U Rule 30.3 is in effect.

↑● ↓—

Black flag. Rule 30.4 is in effect.

Recall Signals

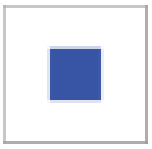
↑●

X Individual recall.

↑●● ↓●

First Substitute General recall. The warning signal will be made 1 minute after removal.

Shortened Course



↑●●

S The course has been shortened. Rule 32.2 is in effect.

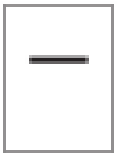
Changing the Next Leg

– – – – –

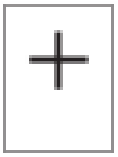
C The position of the next *mark* has been changed:

to starboard;

to port;

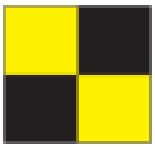


to decrease the length of the leg;



to increase the length of the leg.

Other Signals



↑●

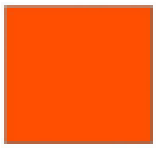
L Ashore: A notice to competitors has been posted. Afloat: Come within hail or follow this vessel.

– – – – –

M The object displaying this signal replaces a missing *mark*.

↑●

Y Wear a personal flotation device (see rule 40).



(no sound)

Orange flag. The staff displaying this flag is one end of the starting line.

(no sound)

Blue flag. The staff displaying this flag is one end of the finishing line.

11 Flag Bag

- **The** flag bag for a mark boat should contain the following flags: A, C, H, L, M, N, S, V, Red, Green and Blue.

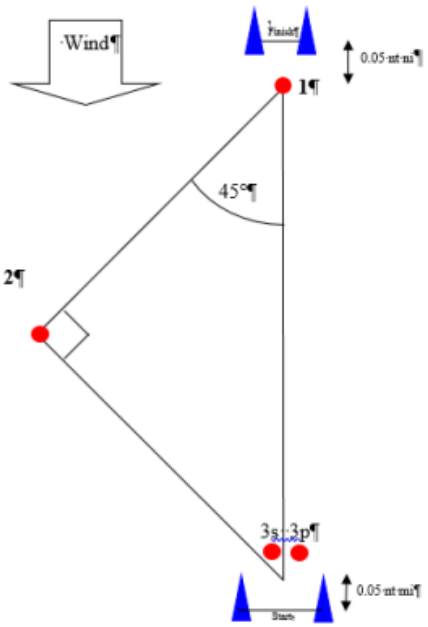
12 Triangle Courses

45°, 90°, 45° Triangular Course

Start/Finish (TL) 0.05 NM downwind of mark 3s/3p or Finish (TW) 0.05 NM upwind of Mark 1

Leg lengths		
3 to 1	3 to 2	1 to 2
1 to 3	2 to 3	2 to 1
0.30	0.21	0.21
0.35	0.25	0.25
0.40	0.28	0.28
0.45	0.32	0.32
0.50	0.35	0.35
0.55	0.39	0.39
0.60	0.42	0.42
0.65	0.46	0.46
0.70	0.49	0.49
0.75	0.53	0.53
0.80	0.57	0.57
0.85	0.60	0.60
0.90	0.64	0.64
0.95	0.67	0.67
1.00	0.71	0.71
1.05	0.74	0.74
1.10	0.78	0.78
1.15	0.81	0.81
1.20	0.85	0.85
1.25	0.88	0.88
1.30	0.92	0.92
1.35	0.95	0.95
1.40	0.99	0.99
1.45	1.03	1.03
1.50	1.06	1.06

Course Distances					
TL2	TL3	TL4	TW2	TW3	TW4
1.42	2.02	2.74	1.12	1.72	2.44
1.65	2.35	3.20	1.30	2.00	2.85
1.86	2.66	3.62	1.46	2.26	3.22
2.09	2.99	4.08	1.64	2.54	3.63
2.30	3.30	4.50	1.80	2.80	4.00
2.53	3.63	4.96	1.98	3.08	4.41
2.74	3.94	5.38	2.14	3.34	4.78
2.97	4.27	5.84	2.32	3.62	5.19
3.18	4.58	6.26	2.48	3.88	5.56
3.41	4.91	6.72	2.66	4.16	5.97
3.64	5.24	7.18	2.84	4.44	6.38
3.85	5.55	7.60	3.00	4.70	6.75
4.08	5.88	8.06	3.18	4.98	7.16
4.29	6.19	8.48	3.34	5.24	7.53
4.52	6.52	8.94	3.52	5.52	7.94
4.73	6.83	9.36	3.68	5.78	8.31
4.96	7.16	9.82	3.86	6.06	8.72
5.17	7.47	10.24	4.02	6.32	9.09
5.40	7.80	10.70	4.20	6.60	9.50
5.61	8.11	11.12	4.36	6.86	9.87
5.84	8.44	11.58	4.54	7.14	10.28
6.05	8.75	12.00	4.70	7.40	10.65
6.28	9.08	12.46	4.88	7.68	11.06
6.51	9.41	12.92	5.06	7.96	11.47
6.72	9.72	13.34	5.22	8.22	11.84



TW2 Start – 1 – 2 – 3s – Finish (Upwind)
TW3 Start – 1 – 2 – 3s – 1 – 3s/3p – Finish (Upwind)
TW4 Start – 1 – 2 – 3s – 1 – 3s/3p – 1 – 2 – 3s – Finish (Upwind)
TL2 Start – 1 – 2 – 3s – 1 – Finish (Downwind)
TL3 Start – 1 – 2 – 3s – 1 – 3s/3p – 1 – Finish (Downwind)
TL4 Start – 1 – 2 – 3s –1– 3s/34p –1 – 2 – 3s – 1 – Finish (Downwind)

¶ Reference Point for laying the course is the middle of the Mark 3s/3p gate¶

If the Heading to 1 is 0° then the Bearing to 3 is 180°

The course will pivot around 3

Then the Heading from 1 to 2 will be 225°, the distance for 1 to 2 and 3 to 2 are the same

The Bearing from 3 to 2 will be 135°

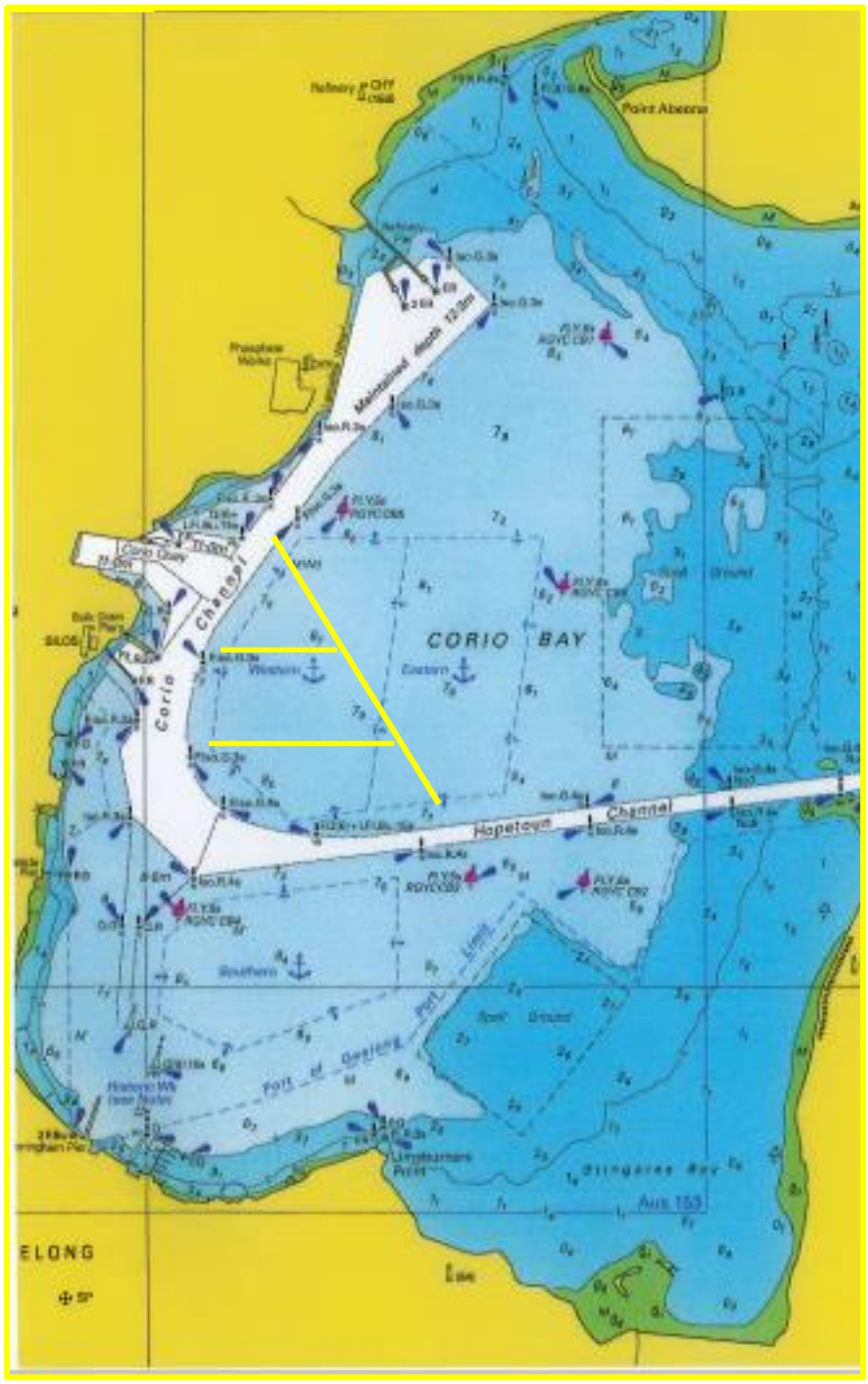
45°, 90°, 45° Triangular Course

Start/Finish 0.05 NM downwind of mark 3 or Finish 0.05 NM upwind of Mark 1

Course Axis	Angles ind degrees						
3 to 1	1 to 3	3 to 2	2 to 3	1 to 2	2 to 1	Signal to Pin	Pin to Signal
000	180	315	135	225	045	270	090
005	185	320	140	230	050	275	095
010	190	325	145	235	055	280	100
015	195	330	150	240	060	285	105
020	200	335	155	245	065	290	110
025	205	340	160	250	070	295	115
030	210	345	165	255	075	300	120
035	215	350	170	260	080	305	125
040	220	355	175	265	085	310	130
045	225	000	180	270	090	315	135
050	230	005	185	275	095	320	140
055	235	010	190	280	100	325	145
060	240	015	195	285	105	330	150
065	245	020	200	290	110	335	155
070	250	025	205	295	115	340	160
075	255	030	210	300	120	345	165
080	260	035	215	305	125	350	170
085	265	040	220	310	130	355	175
090	270	045	225	315	135	000	180
095	275	050	230	320	140	005	185
100	280	055	235	325	145	010	190
105	285	060	240	330	150	015	195
110	290	065	245	335	155	020	200
115	295	070	250	340	160	025	205
120	300	075	255	345	165	030	210
125	305	080	260	350	170	035	215
130	310	085	265	355	175	040	220
135	315	090	270	000	180	045	225
140	320	095	275	005	185	050	230
145	325	100	280	010	190	055	235
150	330	105	285	015	195	060	240
155	335	110	290	020	200	065	245
160	340	115	295	025	205	070	250
165	345	120	300	030	210	075	255
170	350	125	305	035	215	080	260
175	355	130	310	040	220	085	265

Course Axis	Angles ind degrees						
3 to 1	1 to 3	3 to 2	2 to 3	1 to 2	2 to 1	Signal to Pin	Pin to Signal
180	000	135	315	045	225	090	270
185	005	140	320	050	230	095	275
190	010	145	325	055	235	100	280
195	015	150	330	060	240	105	285
200	020	155	335	065	245	110	290
205	025	160	340	070	250	115	295
210	030	165	345	075	255	120	300
215	035	170	350	080	260	125	305
220	040	175	355	085	265	130	310
225	045	180	000	090	270	135	315
230	050	185	005	095	275	140	320
235	055	190	010	100	280	145	325
240	060	195	015	105	285	150	330
245	065	200	020	110	290	155	335
250	070	205	025	115	295	160	340
255	075	210	030	120	300	165	345
260	080	215	035	125	305	170	350
265	085	220	040	130	310	175	355
270	090	225	045	135	315	180	000
275	095	230	050	140	320	185	005
280	100	235	055	145	325	190	010
285	105	240	060	150	330	195	015
290	110	245	065	155	335	200	020
295	115	250	070	160	340	205	025
300	120	255	075	165	345	210	030
305	125	260	080	170	350	215	035
310	130	265	085	175	355	220	040
315	135	270	090	180	000	225	045
320	140	275	095	185	005	230	050
325	145	280	100	190	010	235	055
330	150	285	105	195	015	240	060
335	155	290	110	200	020	245	065
340	160	295	115	205	025	250	070
345	165	300	120	210	030	255	075
350	170	305	125	215	035	260	080
355	175	310	130	220	040	265	085

13 Corio-Bay-CB-Marks



RGYC CB Marks

Mark	Actual Position
CB1	38° 5.552 S 144° 24.206 E
CB2	38° 7.614 S 144° 24.184 E
CB3	38° 7.601 S 144° 23.549 E
CB4	38° 7.747 S 144° 22.157 E
CB5	38° 6.205 S 144° 22.932 E
CB6	38° 6.519 S 144° 24.015 E

The lines in yellow is approximately where the transit zone is, NO anchoring is allowed in that area

14 Vessel Towing Policy 2017

Introduction

Royal Geelong Yacht Club does not offer vessel towing other than for situations described below.

a) RGYC volunteers and staff are not trained in safe vessel towing practices.

b) Crew may not have the physical capacity to deal with towing other vessels.

c) RGYC vessels do not have the equipment that may be required to tow a vessel.

d) RGYC vessels are not built for towing other vessels of greater weight.

e) RGYC vessels are not suitable for towing in storm conditions.

f) Vessels that are stranded or have a break down should telephone the Police on 000 and the Water Police may attend with a vessel that has the capacity to undertake a tow. Radio may also be used to make Securite, Pan Pan or Mayday calls. Volunteer Coast guard may be available to assist

Towing

The safety of RGYC Members, volunteers and staff is paramount. No one should place another person at risk.

RGYC safety vessels will focus on the rescue of people, not boats.

In all circumstances the decision to tow another vessel must comply with the following conditions:

1. Crew on the towing vessel must be fit for the task, licenced as required by law and wear a PFD at all times. Appropriate personal protective equipment must be worn. eg. gloves.

2. Crew must inform a shore based, reliable person of the proposed vessel tow – location, vessel name, estimated travel time and return, contact numbers. Contact the VRCA on Channel 12 or 5247 0300 to inform them of your intention to tow a vessel.

3. Towing is only available in daylight hours.

4. RGYC owned vessels must not tow any other vessel that weighs more than the towing vessel.

5. RGYC rigid hull inflatable vessels may only tow Off the Beach boats or boats stored on the hard stand at RGYC.

6. RGYC rigid hull inflatable vessels will only be permitted to tow allowed vessels during daylight hours and within Corio Bay.

7. Alpha One and Eclipse are permitted to tow an allowed vessel during daylight hours on waters as far away as Point Wilson.

8. No towing of unattended boats.

9. Any vessel that will be used for towing must have the appropriate equipment such as towing bridle, lines of adequate strength and length and a snubber.

10. Staff and volunteers are not to be called privately to provide towing after RGYC operating hours. These hours include times when RGYC on-water events are in progress. Assisting other vessels manoeuvring within the RGYC marina RHIBs with propeller guards may be used to assist other vessels to berth in the marina subject to these conditions:

1. Tow lines are not attached to the RHIB but are to be hand held.

2. RHIBs may push another vessel at low speed over a short distance if requested by that vessel and it is safe to do so.

When yachts or powerboats are participating in an event sanctioned or organised by RGYC it is a condition of entry that should a vessel require towing under the conditions of this policy the vessel owner fully indemnifies RGYC against any claim for damage.

Royal Geelong Yacht Club reserves the right to recover costs incurred in providing a tow for any vessel