### Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay

#### The Days Plan:

Head to Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay. Lunch raft-up is Parakeet Bay – subject to prevailing winds.

Raft up – coming out of Marjorie Bay we will head back to Parakeet Bay, please have your fenders ready springs fore and aft plus one across each for bow and stern we expect it to be at Parakeet Bay. See attached raft up guide.

Comms: Rear Commodore Power - John Whitley Mobile: 0412 58 0412

### Housekeeping

8:00 am: Meeting downstairs bar and meeting room for voyage briefing 8:15 – 08:30 - We head off from the club

The convoy channel to talk between ourselves via Marine Radio

VHF channels 77

Or 27 MHZ Channel 94

It's good safe practice to sign **on and off** with Fremantle sea rescue: Details below:

#### Sea Rescue Log on – off - How?

Fremantle Sea Rescue https://www.searescue.com.au/ As a PFYSC member, you are a FSR member.

The best way to log on is with your marine radio or alternatively, you can log on by phoning 1800 273 728 - 24/7.

#### **Marine Radio**

VHF – Channel 73 (or 16 – emergency)

27Mhz - Channel 90 (or 88 - emergency)

VHF CH 67 Supplementary Distress, Urgency and Safety Traffic

Perth Only: Local Weather and Navigation Safety Warnings at 0718 & 1918 HRS

### Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay

WST.

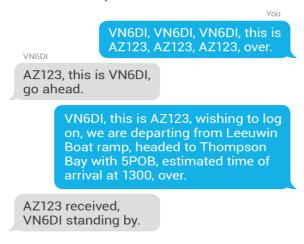
Severe Weather Warnings at 18 minutes past odd numbered hours.

#### Fremantle Sea Rescue Phone Number

Call: 1800 273 728

To log on with Fremantle, you'll need to tell them the following information:

- Your boat registration number (eg. AZ123)
- Your FG number if you are a member with Fremantle Sea Rescue.
- Your point of departure yacht club, ramp, mooring etc.
- Your precise destination Longreach Bay, fishing between 2-4 miles North of West end etc.
- The number of people on board
- Your expected time of arrival for safe ports, or return from fishing trips.



## **Sea State Planning**

Your trip may not necessarily be in a straight line.... (Check out this article at club marine)

https://www.clubmarine.com.au/exploreboating/articles/31-4-Heavy-weather-boathandling

### Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay

It's important before boating to check the weather and the seas at the location your leaving through to the destination you are going to. We would also recommend you take a look at the whole duration of your trip and make decisions having got as much information as possible about the elements that can affect your trip and that could determine a comfortable journey for you and your guests or what could turn into a disaster.

- https://www.willyweather.com.au/wa/perth/rottnest-island.html
- <a href="https://www.willyweather.com.au/wa/perth/fremantle-south-beach.html">https://www.willyweather.com.au/wa/perth/fremantle-south-beach.html</a>
- <a href="https://www.willyweather.com.au/wa/perth/swan-river--perth-flying-squadron-yacht-club.html">https://www.willyweather.com.au/wa/perth/swan-river--perth-flying-squadron-yacht-club.html</a>
- https://www.windy.com/?-31.903,115.521,10,m:cLOajnN

#### PLEASE NEVER UNDERESTIMATE THE ELEMENTS – RESPECT THEM...

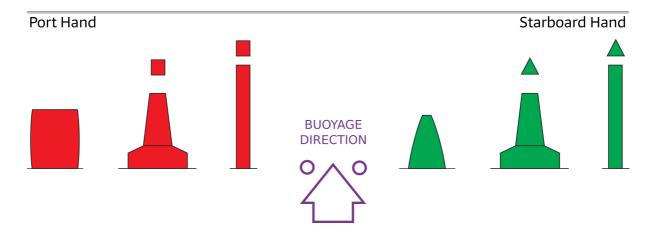
## **Buoys, Beacons and Marks**

The International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) is a worldwide standard sea mark system used in navigation to mark the edge channels. These road signs on the water are made up of five buoy types - cardinal, lateral, isolated danger, special and safe water marks. These buoys and marks indicate where safe water lies and where you should navigate safely within a channel. Always refer to a local chart to identify where potential hazards may be.

## Lateral Markers – Red and Green The coming in, going out rule –

When entering harbours or travelling upstream in a river, leave port hand marks on your port (left) side and starboard hand marks on your starboard (right) side.

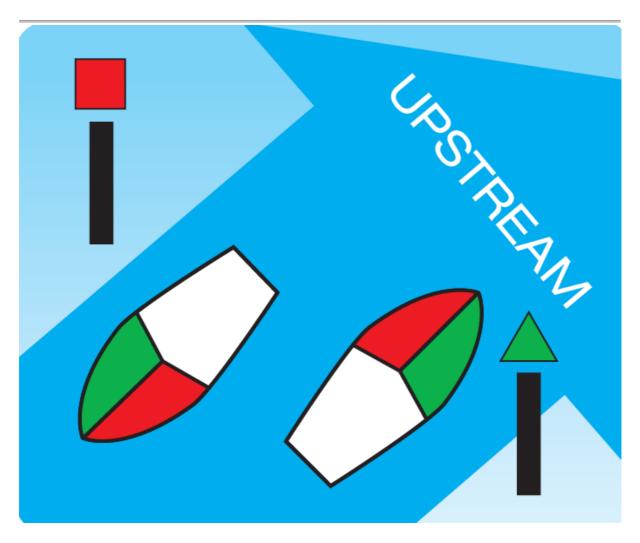
## PFSYC - Rottnest Convoy Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay



**Tip:** When travelling upstream one way to remember this is the saying *there's some red, port, left in the bottle.* Also, 'port' and 'left' only have four letters in the word.

When leaving harbours or travelling downstream, it reverses – leaving harbour out to sea - port lateral marks on your starboard (right) side; and starboard lateral marks on your port (left) side.

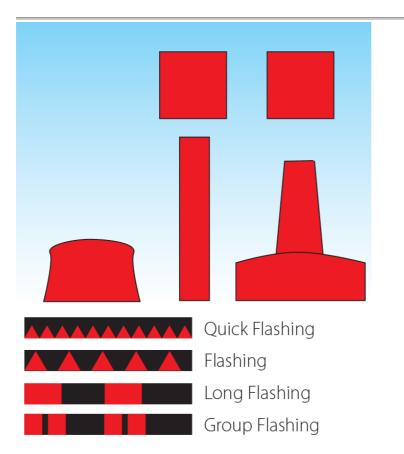
PFSYC - Rottnest Convoy Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay

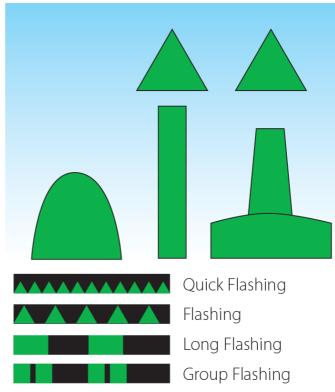


Lateral marks are not always placed in pairs where you simply must pass between them. When you see just one, you will need to bear in mind the upstreamdownstream principle.

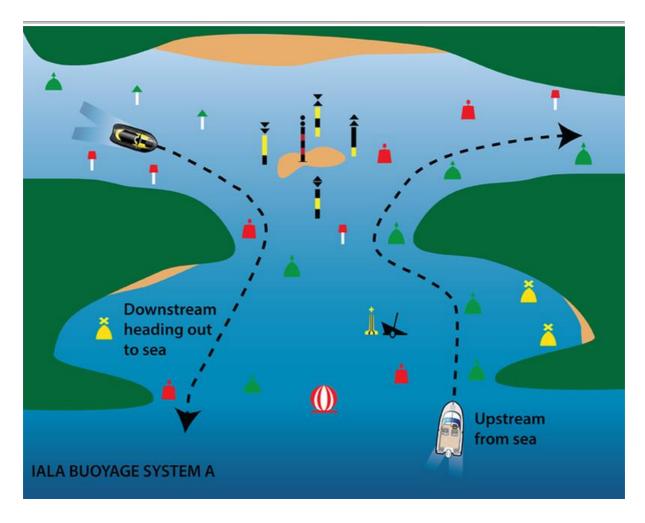
NOTE: At Rottnest - Most lateral markers are NOT lit at night.

PFSYC - Rottnest Convoy Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay





## PFSYC - Rottnest Convoy Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay



When travelling upstream or away from the sea:

- keep port (red) marks on your port-hand side (left)
- keep starboard (green) marks on your starboard-hand side (right).

When travelling downstream or towards the sea:

- keep port (red) marks on your starboard-hand side (right)
- keep starboard (green) marks on your port-hand side (left).

#### **Cardinal mark features**

Cardinal marks show where the deepest and safest water is by using a compass. They can mark:

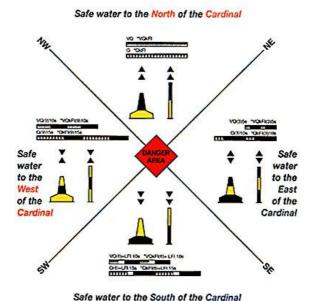
### Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay

- where to find the deepest water in an area
- the safe side to pass a danger
- a feature in a channel (for example, a bend, junction or the end of a shoal).

Cardinal marks have black and yellow bands with black double cones on top showing the different compass direction that identifies the safest and deepest water to travel in.

At night, each type of cardinal mark has a flashing white light with different groupings of flashes (continuous, or groups of 3, 6 or 9).

To remember each type, think of a compass face with the numbers of a clock marked on it beside each direction (North, East, South and West).



Think of a clock face when remembering the lights on cardinal marks. Three flashes for east, six flashes for south and nine flashes for west.

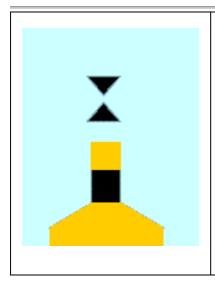
By day the colour scheme can be remembered by noting that the black segment is positioned where the cones point.

Cardinal Marks	Description	Light Phases
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## Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay

North cardinal marks show there is safe water to the North of the mark.  North - the top mark points up and black segment is at the top  The top cones point up or North	At night, the white light flashes quickly or very quickly and continuously.
East cardinal marks show there is safe water to the East of the mark.  East - the top marks point outward and there are black segments top and bottom.  The top cones are in the shape of an egg. To remember this, think of 'e' for egg and for East.	At night, the white light flashes quickly or very quickly 3 times every 5 or 10 seconds.
South cardinal marks show there is safe water to the South of the mark.  South - the top mark points downward and the black segment is at the bottom.	At night, the white light flashes quickly or very quickly 6 times followed by a long flash every 10 or 15 seconds.

## Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay



West cardinal marks show there is safe water to the West of the mark.

West - the top marks point inward and the black segment is in the middle.

The top cones make the shape of a wine glass. To remember this, think of 'w' for wine glass and for West.

At night, the white light flashes quickly or very quickly 9 times every 10 or 15 seconds.

### **Lead Markers (or Transit Marks)**

Lead marks are a method used to define the correct course to be steered when in waters containing navigation hazards. Lead marks are made up of 2 marks: one in the foreground and the other behind and above it. They are usually lit at night but NOT at Rottnest.

They are often used to mark the correct approach to a navigation channel, crossing coastal bars and into shipping ports which is then defined by lateral marks.

## PFSYC - Rottnest Convoy Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay



The lead marks are two separate navigation aids (one in the foreground and one placed further back on the shore) which, when aligned, provide the correct course for the vessel to steer.

To keep your vessel in safe water:

- line up the 2 marks, one above the other
- travel directly towards or away from the lined-up marks.

Lead marks may be day marks or may be lit for night use. The day marks are normally two triangles.

To steer the correct course the boat should be manoeuvred so that the apex (point) of each triangle comes into alignment. Leading lights / beacons usually display a triangle shape. The front lead has its apex pointing up and the rear or back lead has its apex pointing down.

When the leads are in line, you are travelling in the middle of the channel. Where leads are used to mark the middle of larger shipping channels small vessels should IMPOKTANT NOTE The maps in this guide are not to be used for navigation. Navigational aids positions may change. For navigation, refer to official nautical charts published by maritime agencies and your own vessels plotter.

### Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay

travel on the starboard side of the channel to keep clear of large ships. This is especially important at night.

Fixed white day lights are sometimes used to mark the leads. At night, major leads are usually lit with blue lights.



#### Leads are:

- A pair of navigation marks, used to indicate a safe passage for vessels entering a shallow or dangerous channel.
- Separated in distance and elevation, so that when they are lined up vertically, with one behind the other, they provide a bearing.
- Usually used to enter a harbour, anchorage or navigate a channel.
- Often used for the approaches to anchorages (there are many at Rottnest) instead
  of lateral marks.

You steer to keep the rear lead directly above the front lead.

All lead marks and sector lights are shown on maps and charts. For your safety, check your chart before travelling on unfamiliar waterways.

### Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay



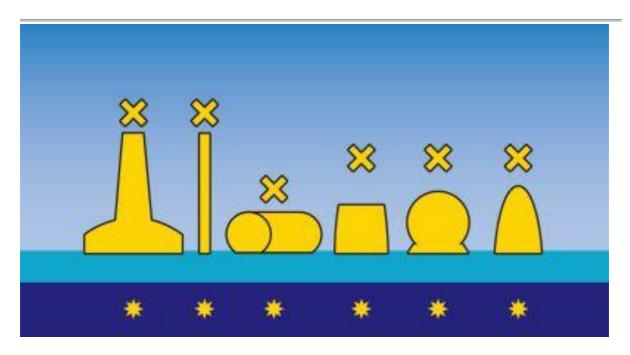
## **Special Marks**

Indicates a special area which should be kept clear of. For example, marine reserve borders, to show that a channel divides, spoil grounds or to mark cables or pipelines.

They can also mark a channel within a channel. The direction to travel around a special mark is usually referred to or shown on charts.

Special marks are yellow and sometimes have a yellow X as the top mark.

PFSYC - Rottnest Convoy Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay



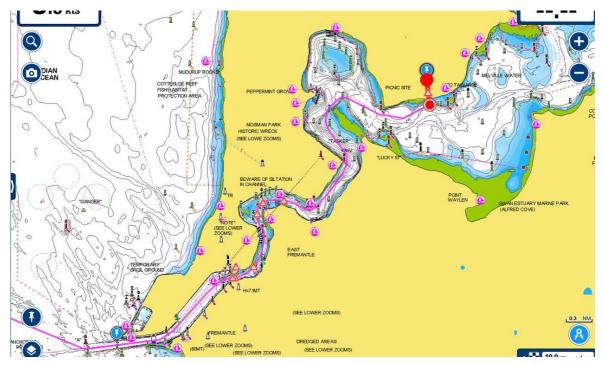
Coloured yellow, <u>if</u> lit at night it shows a flashing yellow light. The top mark is a single yellow cross. Check your chart to find out what is special in the area you are boating in.



### Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay

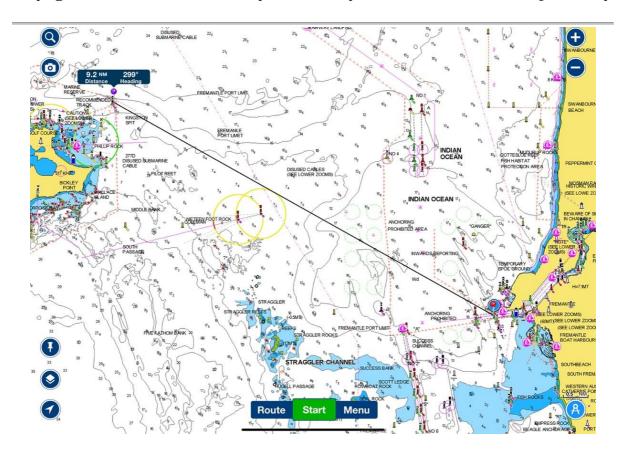
#### STAGE 1

First stage of the trip we leave the club no later than 08:30 am and head down the river to Fremantle heads.



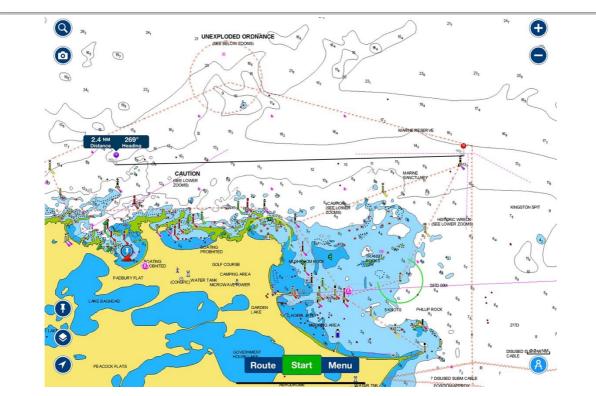
Exiting the Harbour Heads depending on wind and swell often we head between 290-300 degrees to the EASTERN side of the Kingston Spit north cardinal marker. As you can see below all being perfect roughly 299 degrees is on a still day:

## Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay

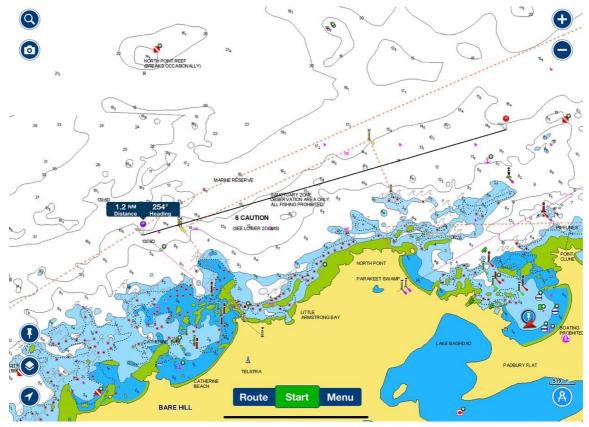


Once passed the north cardinal marker Kingston Spit at Kingston reef – You must change direction to Geordie before changing slightly again to Catherine and so head approx 269 degrees so as to and travel through to the next destination parallel to Geordie Bay.

## PFSYC - Rottnest Convoy Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay



Then adjust slightly as we make our way out from Geordie to Catherine Bay 254 degrees and make our way to the entry near the north cardinal marker for Catherine Bay.



### Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay

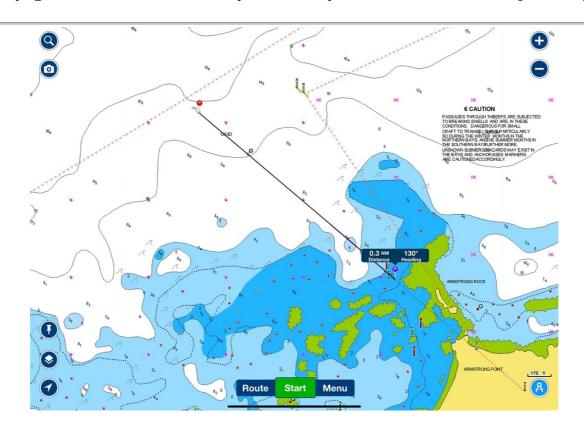
TIP: Go past the yellow special marks until you line up the triangle lead

markers to the beach Look for the lead markers at the base of the cliff and on the upper edge of the cliff. They are triangles, that if you get the two points to meet show you clear access to the bays. Head approx 130 degrees towards the lateral markers.



Head approx 130 degrees

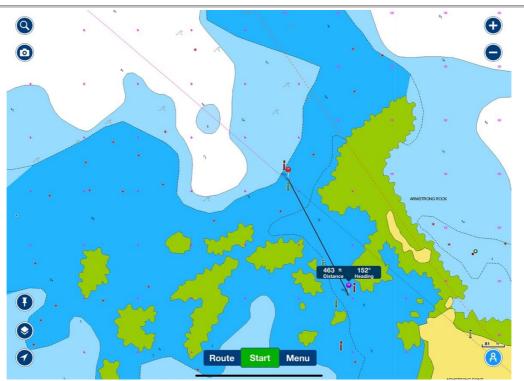
Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay



#### **CATHERINE BAY**

After the marker we will be heading into Catherine Bay. Using the formula of heading into harbour, make sure you are the correct side of the lateral markers. The Red lateral markers on your Port as you are heading into a Bay/Harbour and the Green lateral ones on your starboard - heading approx 152 degrees –

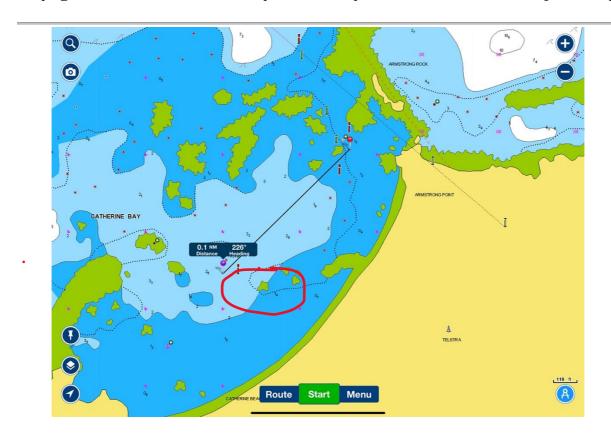
Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay



Then change direction to 226 degrees towards the next set of lateral markers. Again making way through the lateral markers keeping the **Red** on your port (left) and the **Green** on your starboard (right).

TIP - Watch out for rocks to the south of the Red lateral mark.

Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay



EXITING Catherine Bay – Reverse everything we did on entry – Head 047 degrees.

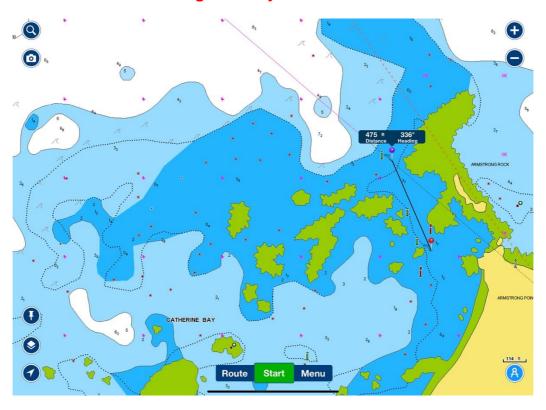
TIP – We are now heading out to sea, out of the harbour. **Your lateral post colours are now opposite**. **Red** to starboard (Right); and Green to Port (Left) when exiting the Bay

## PFSYC - Rottnest Convoy Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay



Switch to 336 degrees to exit out toward the ocean.

TIP – Look back and if the orange lead triangles points meet up? If so you are exiting correctly in the channel.



## Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay

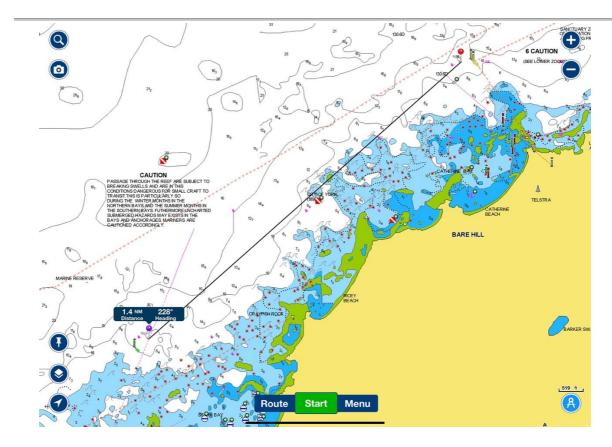
When exiting Catherine head 310 degrees towards floating spit post

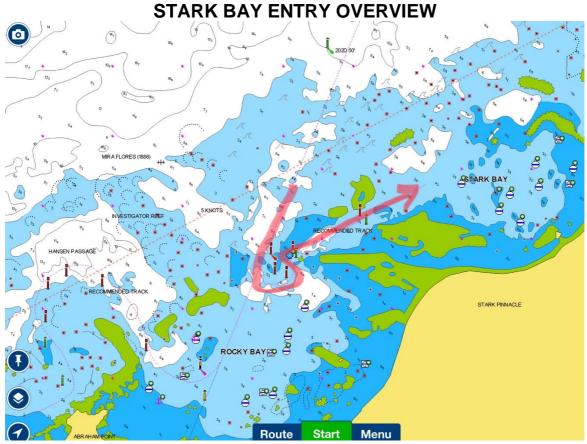
SAUTION

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Once alongside the marker, alter to 228 degrees heading towards Stark Bay

PFSYC - Rottnest Convoy Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay





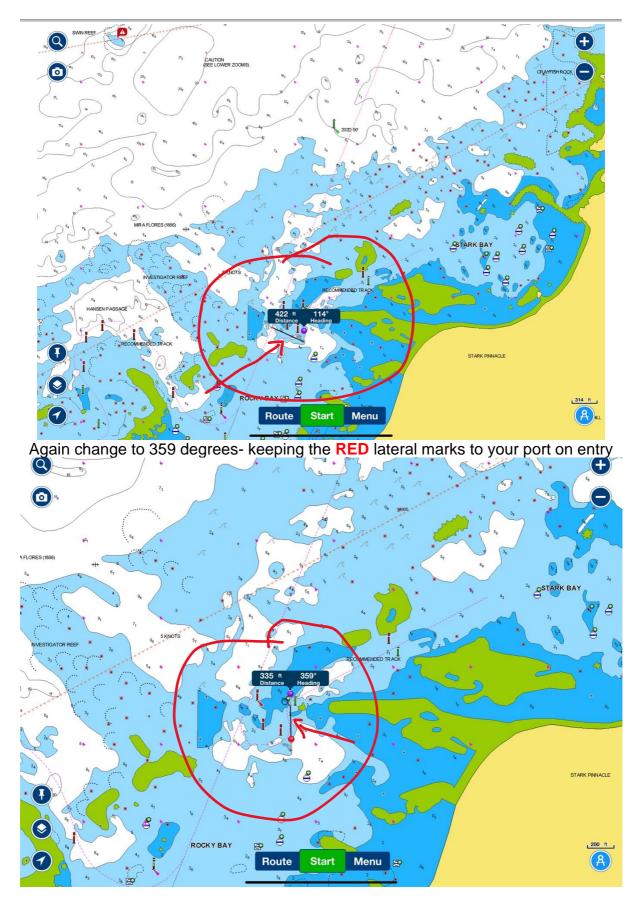
### Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay

Look for Stark Bay lead markers (Triangles) & head 202 degrees as they line up. A green lateral marker should pass to your starboard as you follow the leads into harbour, towards the red (port) lateral marks.



Keeping the red lateral marker on your port on entry change your heading 114 degrees – still further into harbour – Stark Bay.

## PFSYC - Rottnest Convoy Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay



## Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay

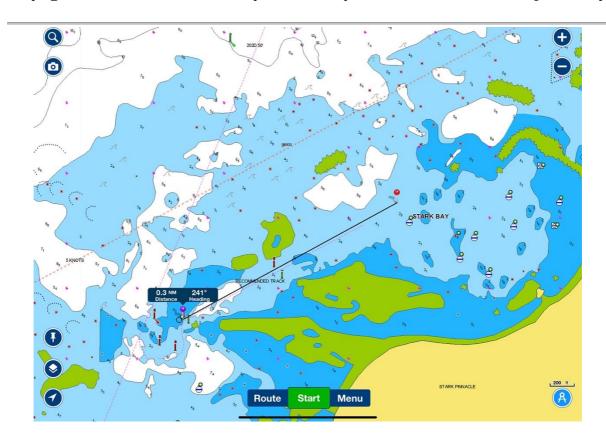
On approaching the last pair of lateral marks you want the Green one on your right and the RED one on your port and head 61 degrees



Welcome to Stark Bay - Congratulations

Now let's go to Rocky and Narrow Neck on the way to Marjorie – heading 241 degrees back to the spit posts. **As you are leaving harbour, your lateral post colours are now opposite**. **Red** to starboard (Right); and Green to Port (Left) when exiting the Bay

PFSYC - Rottnest Convoy Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay



Change heading to 183 degrees and then 204 degrees heading to the beach



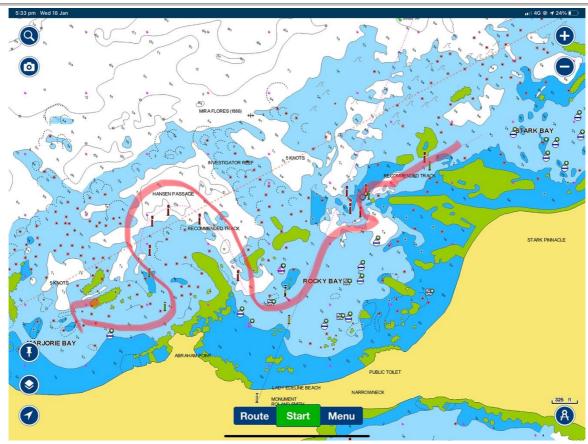
Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay



Welcome to Rocky Bay & Narrow Neck - Congratulations

Next we are heading to Marjorie – see Stark to Marjorie Bay overview below

## Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay



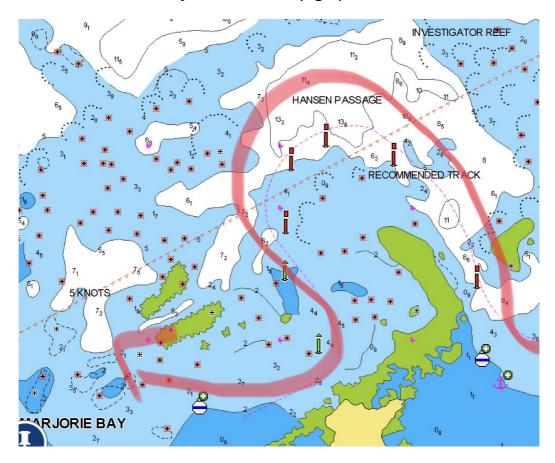
As you traverse Rocky Bay, you are again coming into harbour. Head 316 Degrees toward the RED lateral marks. Keep the Red lateral marks on your port (left) side



Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay

Follow them all the way around with the RED lateral marks on your port (left) side.

Once around the Red lateral marks, you will see two Green lateral marks. Keep the Green lateral marks to your starboard (right) for both and .....



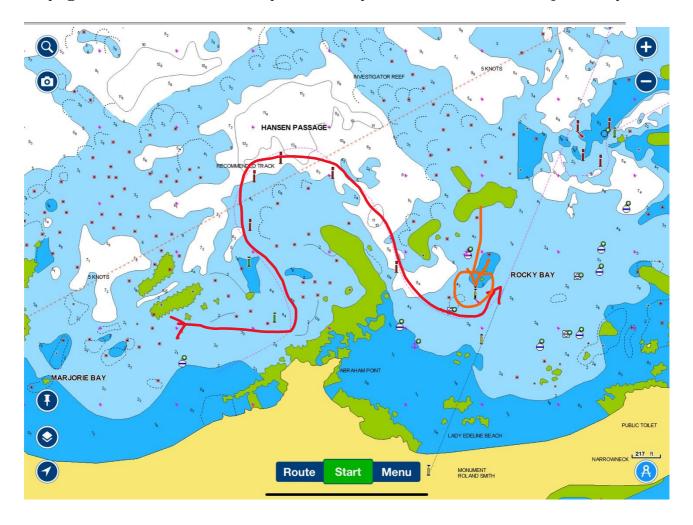
**CONGRATULATIONS** you have made into Marjorie Bay!!!

That's four bays you have now entered successfully.

Leaving Marjorie Bay (leaving harbour) reverse what we just did – **As you are**leaving harbour, your lateral post colours are now opposite. Red to starboard (Right); and Green to Port (Left) when exiting to Rocky Bay

For those of you going straight home we will go Northeast of Transit Reef, back past the Kingston Spit north cardinal marker to show you the safe way to go around and then straight home to Fremantle.

PFSYC - Rottnest Convoy Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay

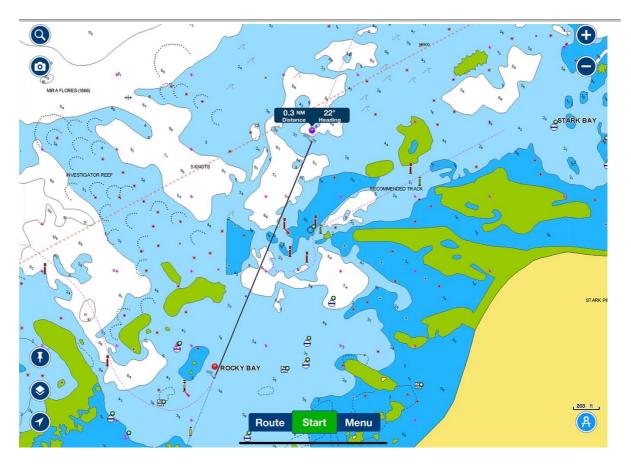


From **Rocky Bay** head straight out past the **RED** lateral markers keeping them on your starboard (right) to exit straight to the sea.

TIP: Beware there is a south cardinal marker as you turn out towards where it says "Rocky Bay" in this image. A South cardinal mark shows there is safe water to the South of the mark. South - the top mark points downward. This is just reminding you to stay south of that market before turning and heading 22 degrees till you are pot to the ocean (see image on the next page)

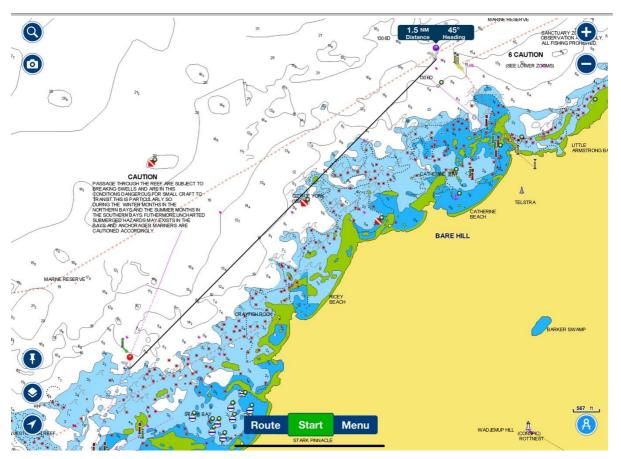
TIP – Look back and if the orange lead marks (triangles) meet up you are exiting correctly

PFSYC - Rottnest Convoy Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay



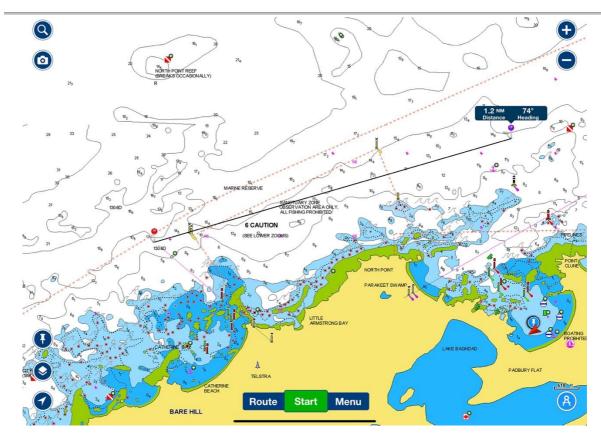
Then adjust course to 45 degrees towards Catherine again on the way past Geordie Bay towards Kingston Spit North cardinal marker. Directional changes at each stage are the following images.

## Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay



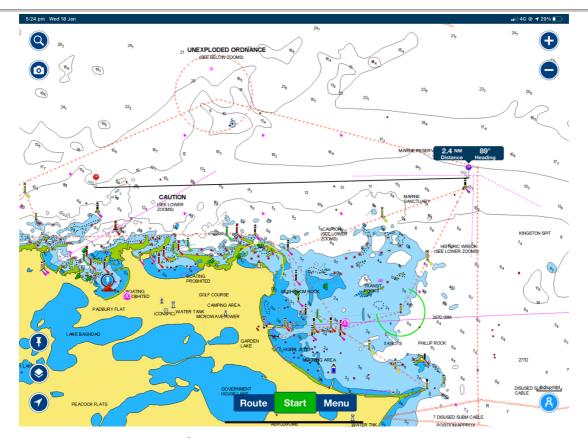
When parallel to Catherine Bay adjust direction slightly to 74 degrees

## Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay



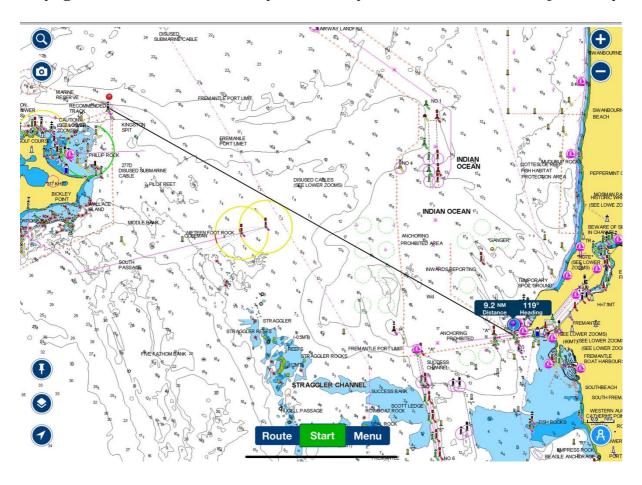
When parallel to Geordie Bay adjust direction slightly to 89 degrees towards the Kingston Spit North cardinal mark.

Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay



Upon turning at Kinston Spit North cardinal mark post head 119 degrees toward Fremantle heads

## PFSYC - Rottnest Convoy Voyage notes for Catherine Bay/ Stark Bay / Narrow Neck & Marjorie Bay



Using a visual marker as you get closer if you can see the top of the marine museum roof you want to be slightly to the right of it and also you can use the cranes in the harbour as a visual point and stay right of those as you head home.

\*\* Last reminder when entering any Harbour / port / bay / heading upstream - keep the Red lateral marks to your port (left) and the Green lateral marks to your starboard (right).

Welcome home.