

Fixing Position

Week 3 – 2023/4



1

Fixing Position

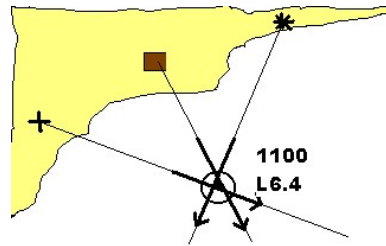
- Electronic Methods:
 - Global Positioning System*
 - Radar
 - Echo Sounders*
- Visual Fixing:
 - Bearing lines*
 - Transits*
 - Rising/dipping distances with lights
 - Transferred position line

* *Day Skipper Techniques*



2

Three Point Fix



- Take bearings on three objects to fix your position.
- Objects must be identifiable on the chart and on the land.
- Objects should be about 40° apart.
- Take ahead and astern bearings first and the one on the beam last.
- Record bearings, time and log reading.



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3 Point Fix Example

RYA Chart 4F
Take Variation as 6°W

A yachtsman records the following in his log having anchored in Monkton Bay.

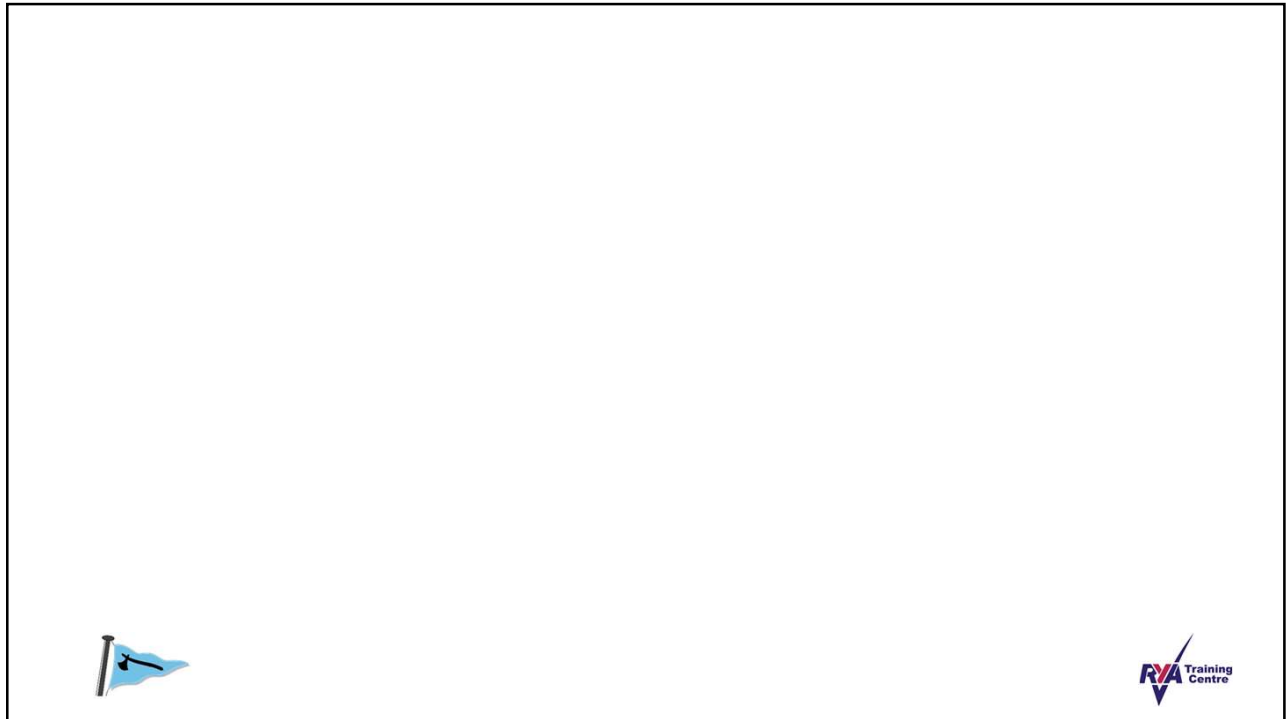
1830	Golf Course Clubhouse Flagpole 041M
	Cleve Church Tower 079M
	Mutton Head Lt 102M



Plot the vessel's position at 1830.



4

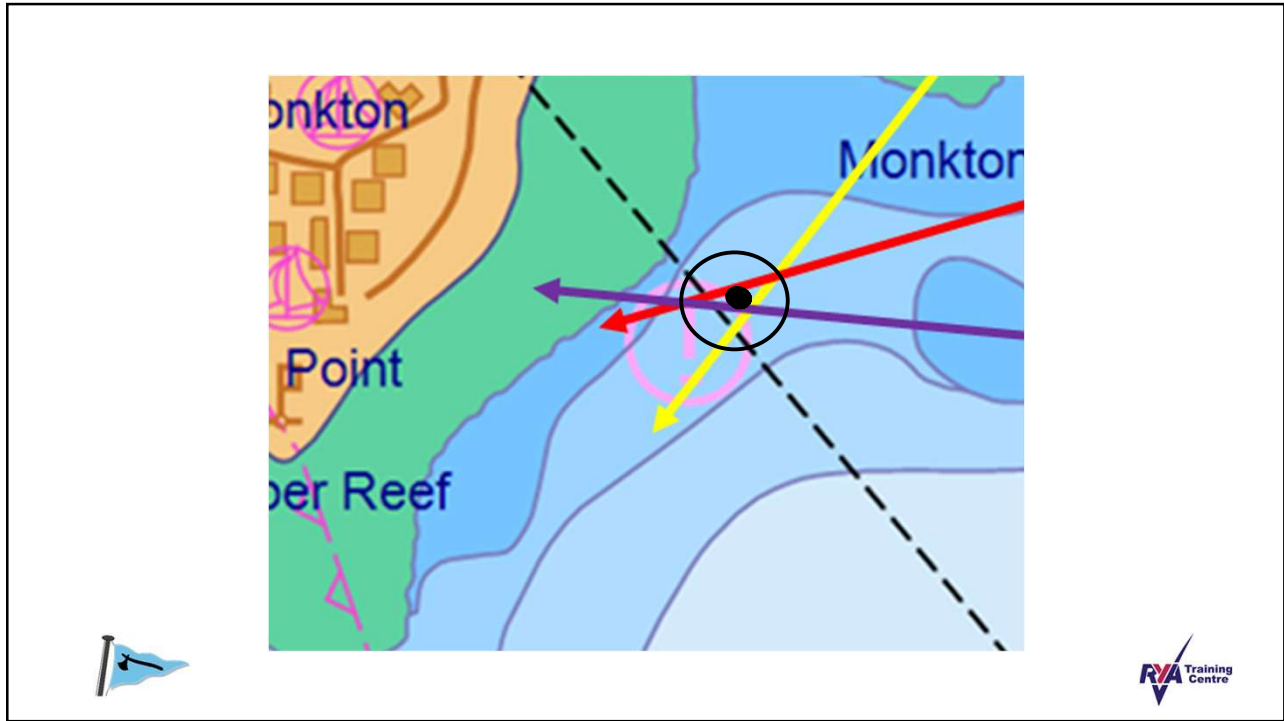


5

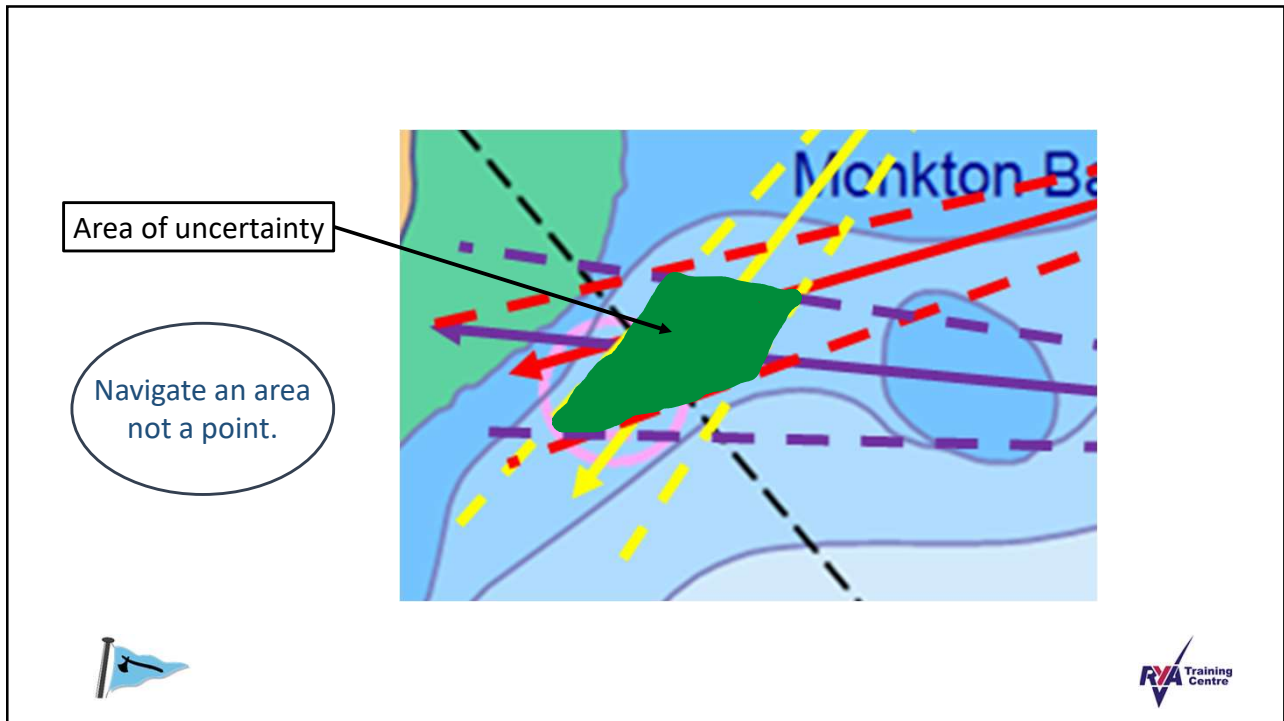
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A nautical chart showing a coastal area. A yellow circle highlights a small island labeled 'Mutton Head'. A red dashed line points from 'Cleve' towards the yellow circle. A blue dashed line points from 'Monkton Bay' towards the yellow circle. Other labels on the chart include 'STRONG HOLM', 'Cleve', 'Monkton Bay', 'Mutton Bay', 'Mutton Head', 'The Swifles', 'Conger F', 'Point', and 'Reef'. There are also various navigational symbols like crosses and squares on the chart.A small icon of a blue flag on a black pole in the bottom left corner. The RYA Training Centre logo is in the bottom right corner.

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7



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Additional confirmation?



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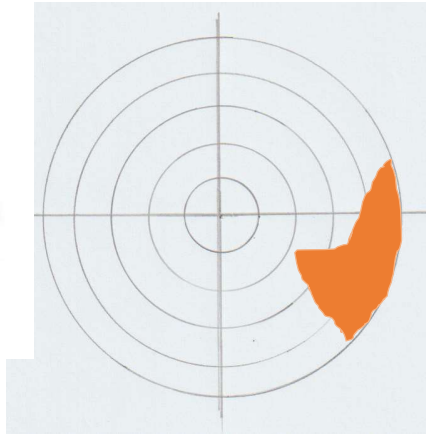
Using Radar

- Distance to object by radar and visual bearing
- Three-point fix using distances to the objects.



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Bearing and distance



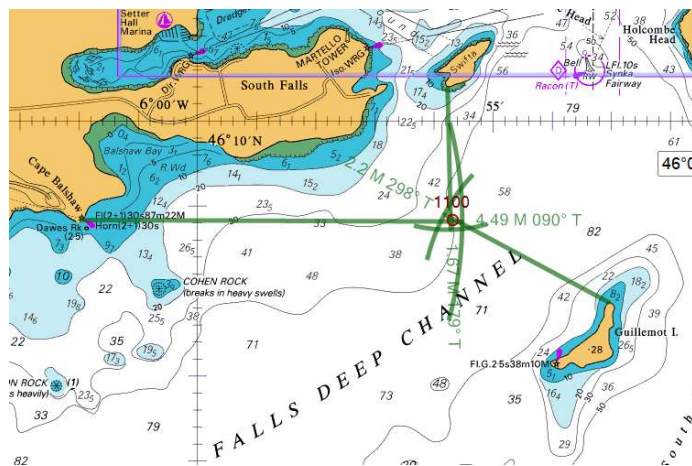
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Three-point fix using radar ranges

1100

From the radar:

- Cape Balshaw 4.49nm
- SW Corner Swifta 1.67nm
- N tip Guillemot Is 2.2nm



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