

An underwater photograph of a shipwreck on a sandy seabed. A diver is visible in the upper right, illuminating the wreck with a flashlight. The wreck consists of a large, rusted metal structure, possibly a hull or a large container, with various pipes and fittings. The water is a deep blue-green, and the seabed is covered in sand and some small marine life.

Wreck Appreciation Course

Wreck Location



Carnatic



Ulysses



Rosalie Moller



Lesson Outline

Why accurate knowledge of location is required?

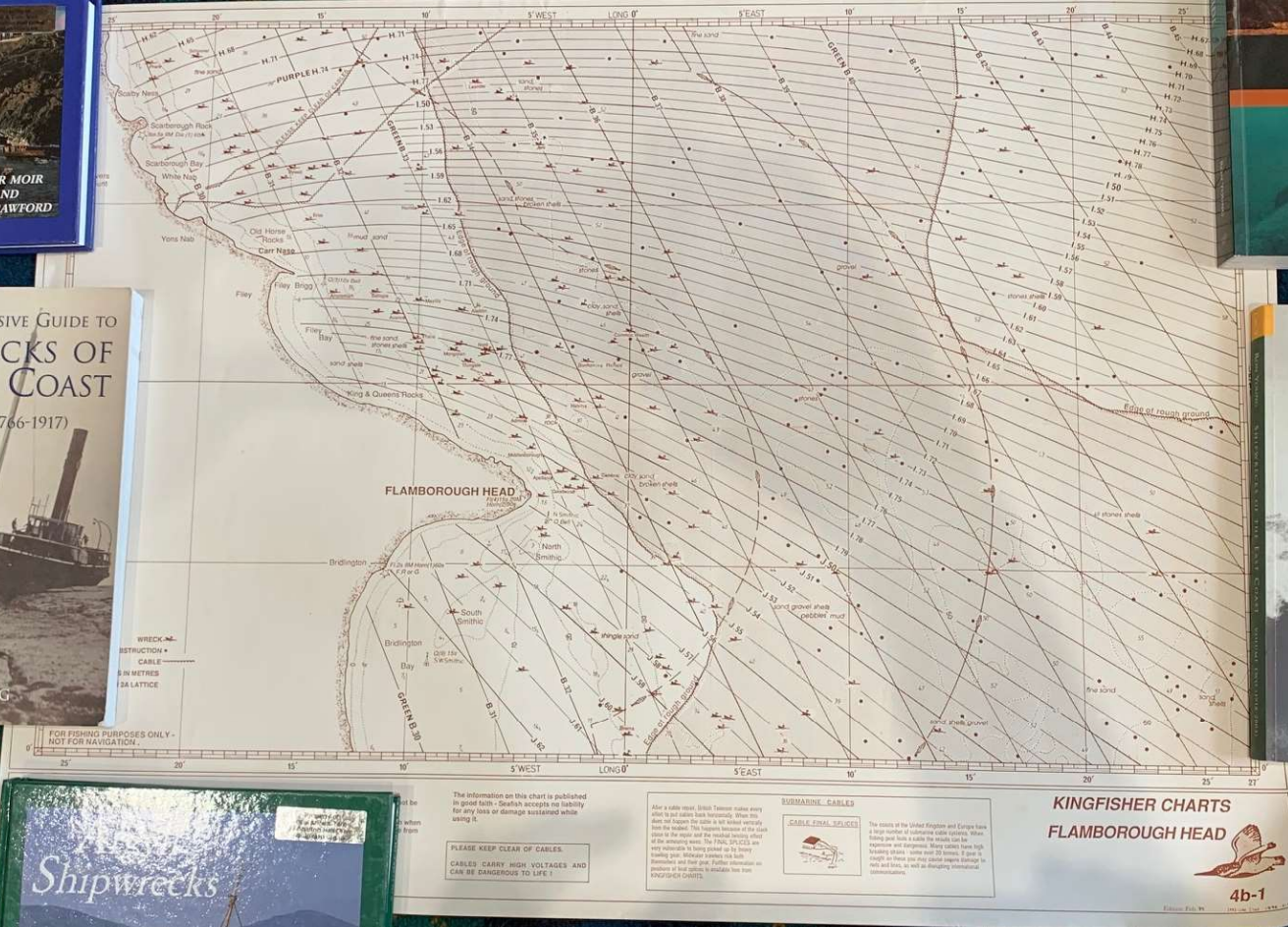
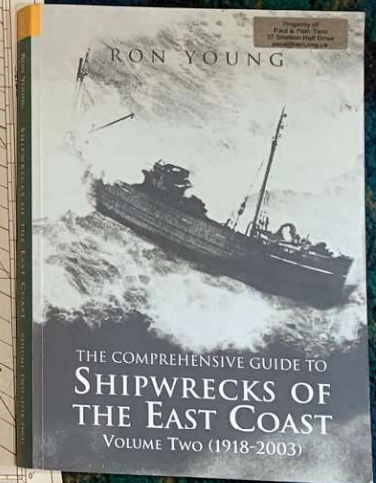
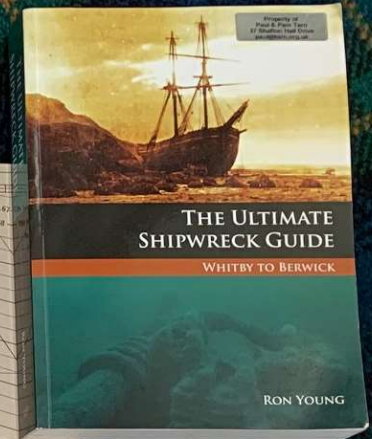
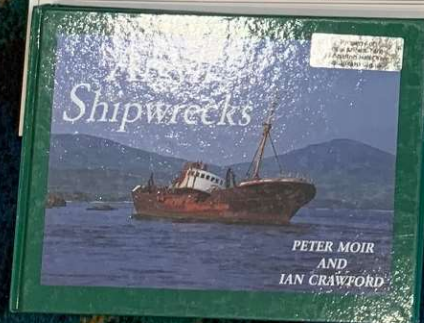
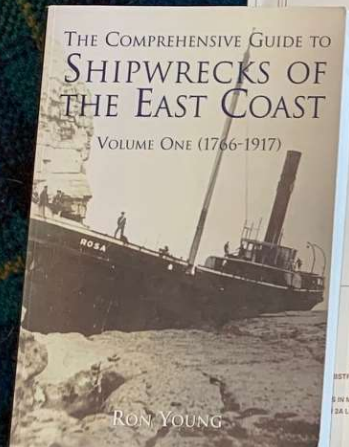
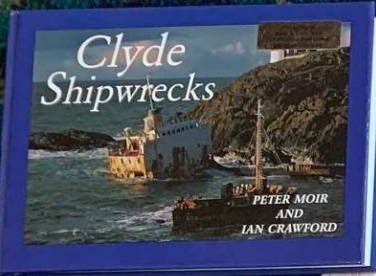
Sources of information

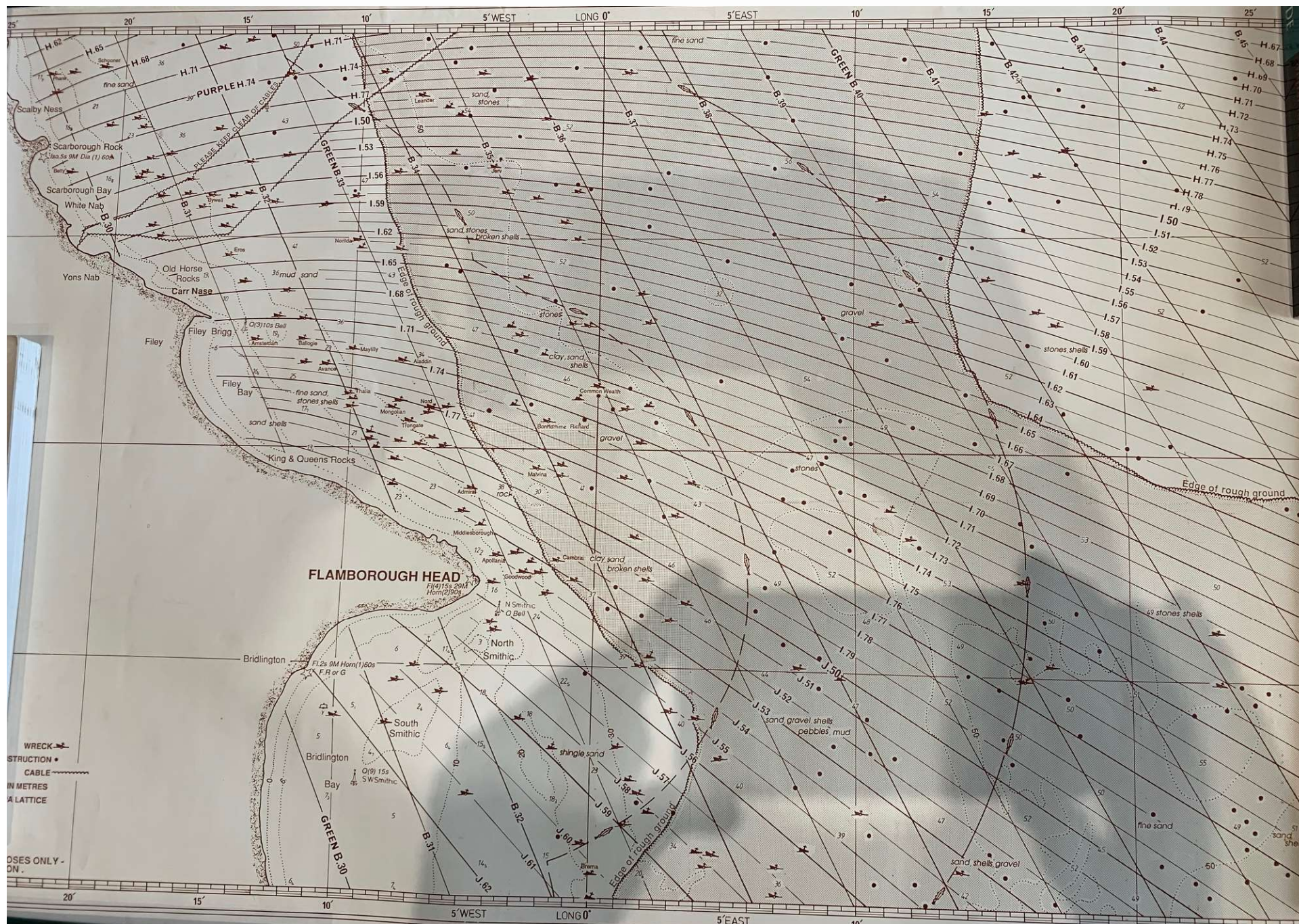
- Charts Kingfisher
- Books
- Wrecksite.eu

Finding your wreck

- Position Fixing
- Confirming that you are over a wreck







Archive Sources

National Maritime Museum

- Photographic library and ship models

Lloyds Registry of Shipping

- Insurers record all losses

National Libraries

- Store copies of newspapers
- Archive ship builder's documents



The Web

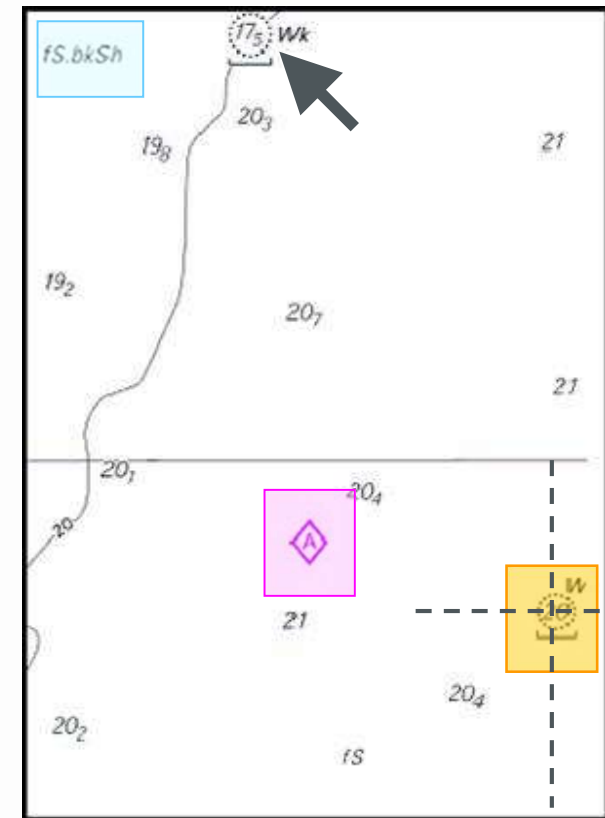
- Vast amounts of data can be accessed, as many of the above transfer their access point to the web

Charts

United Kingdom Hydrographic Office (UKHO) publish 'Admiralty Charts'

Charts give information about wrecks

- Position - latitude and longitude
- Depth of water over wreck
 17.5 metres
- Seabed material
fS.bkSh fine sand broken shell
- Tides  Tidal diamond













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UKHO

Chart 5011

Chart 5011 gives the key

- Symbols are primarily to represent navigation information
- Charts have symbols to represent wrecks
- Show position, depth of water over wreck and how measured
- Not always precise!
- Not all wrecks have been located!

24		Wreck showing any part of hull or superstructure at the level of Chart Datum
25	<div>  </div> <div>  </div>	Wreck of which the mast(s) only are visible at Chart Datum
26	<div>  </div> <div>  </div>	Wreck over which the depth has been obtained by sounding but not by wire sweep
27	<div>  </div> <div>  </div>	Wreck which has been swept by wire to the depth shown
28		Wreck, depth unknown, which is considered dangerous to surface navigation
29		Wreck, depth unknown, which is not considered dangerous to surface navigation
30		Wreck over which the exact depth is unknown, but which is considered to have a safe clearance at the depth shown

Best Sites

Wrecksite.eu

- Online subscription of approx. £20 per year and gives access to all UK hydrographic charts

Wrecktour

- Great site with lots of and orientation. Main features of site including position, launching site, boat charter and air fills

Forums – Yorkshire Divers

- Good local knowledge of sites, slack water times, etc.

Finding Your Wreck

Sometimes very easy!
Wreck showing



Sometimes nearly as easy!
Wreck buoyed

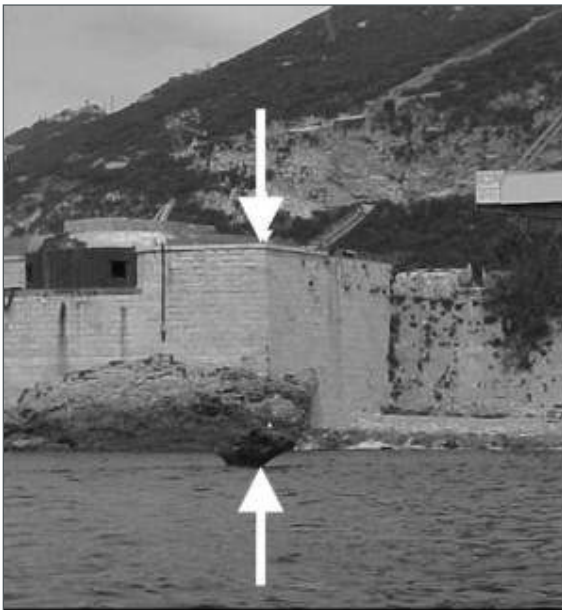


Visual Positioning Techniques (1)

Sometimes it's a bit harder ~ Visual positioning techniques

Transits

- Position line by two objects in line
- Two intersecting position lines = position fix



Visual Positioning Techniques (2)

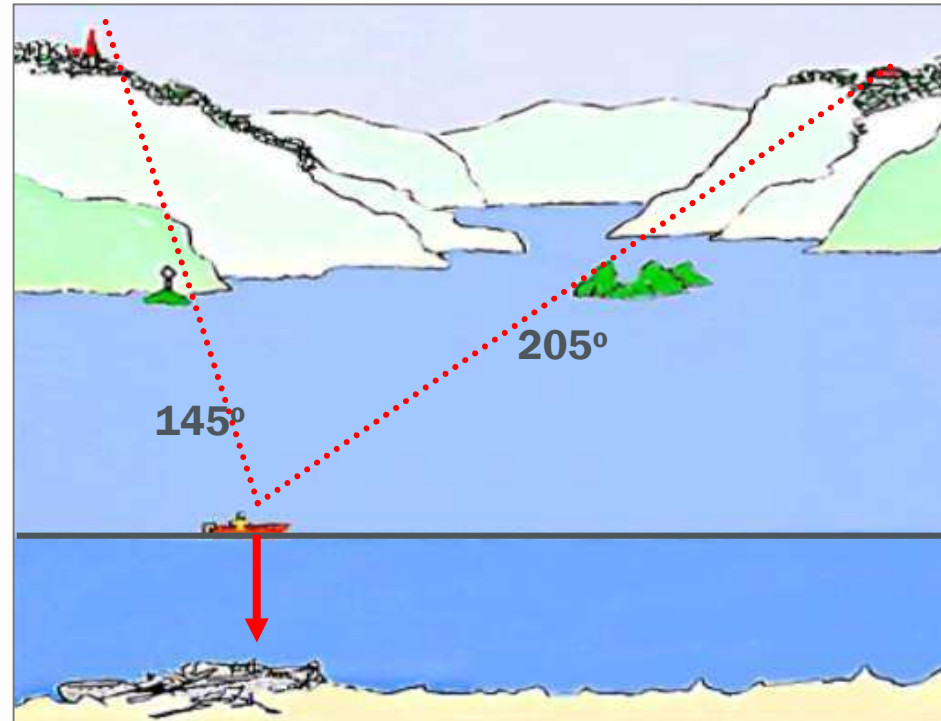
Position line

One transit or bearing



Position fix

Two transits and / or bearings



Electronic Positioning Techniques

Global positioning system (GPS)

- Computes its position on earth from satellite information
- Wreck site entered as a 'Waypoint'
- Unit directs you there



Finding the wreck using Lat and Long

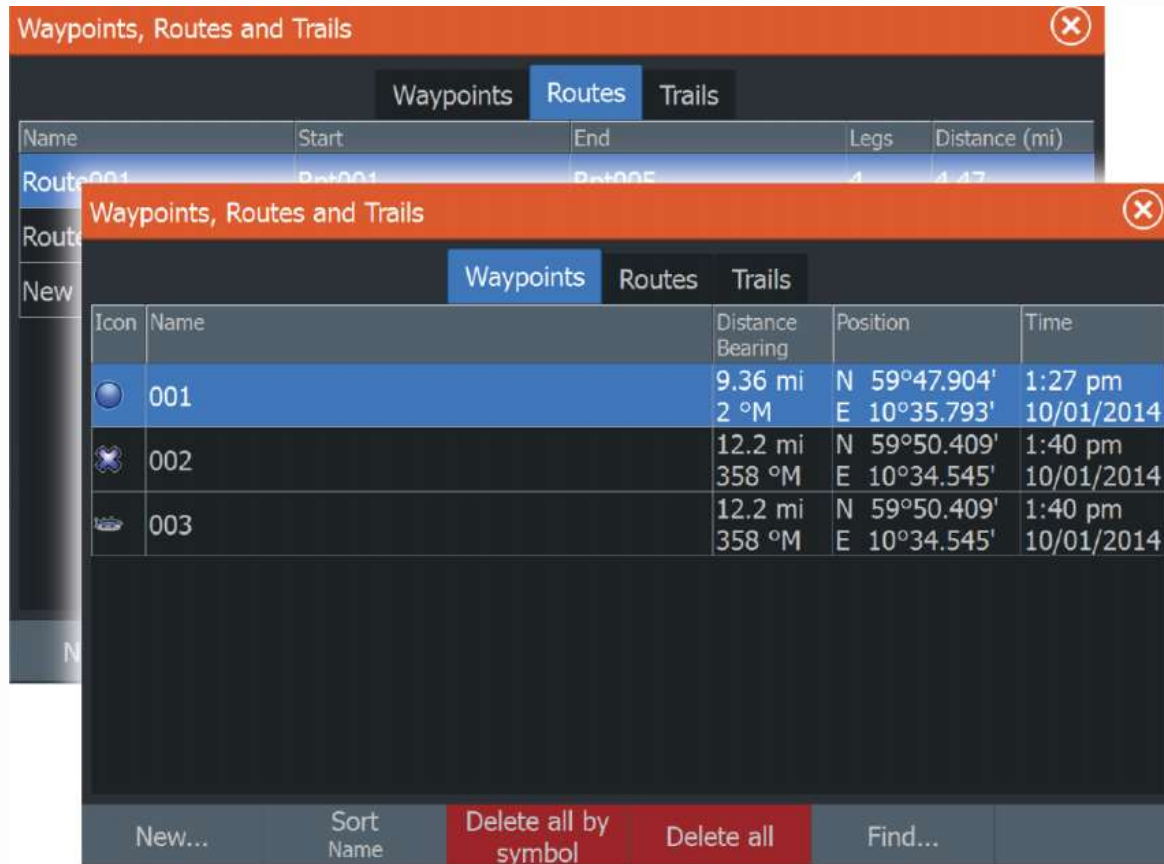


Chart Plotter – Example Lowrance with structure Scan

Mark on Object on Sonar – appears on chart

- Gives Depth and some detail
- What if object is wreckage that lays flat?



Side Scanning Sonar with a fish

Example JX-596 Catalina Wing



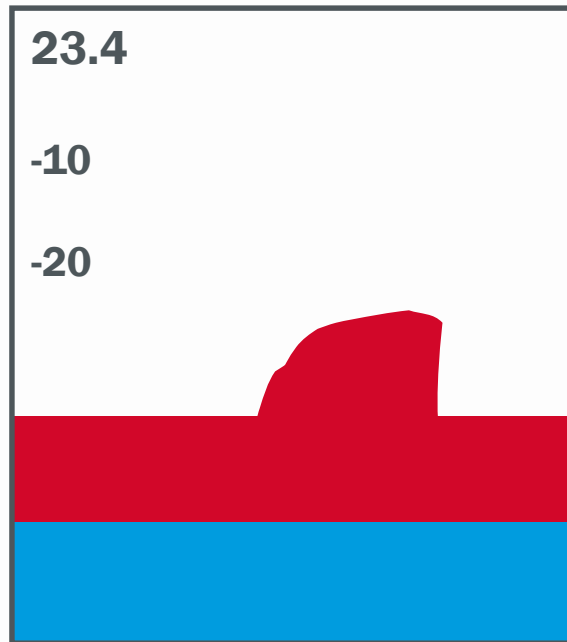
Confirmation Techniques

Do not want to dive on “HMS Vicinity”

- Need positive indication that wreck is below the dive boat

Different ways

- Echo Sounder

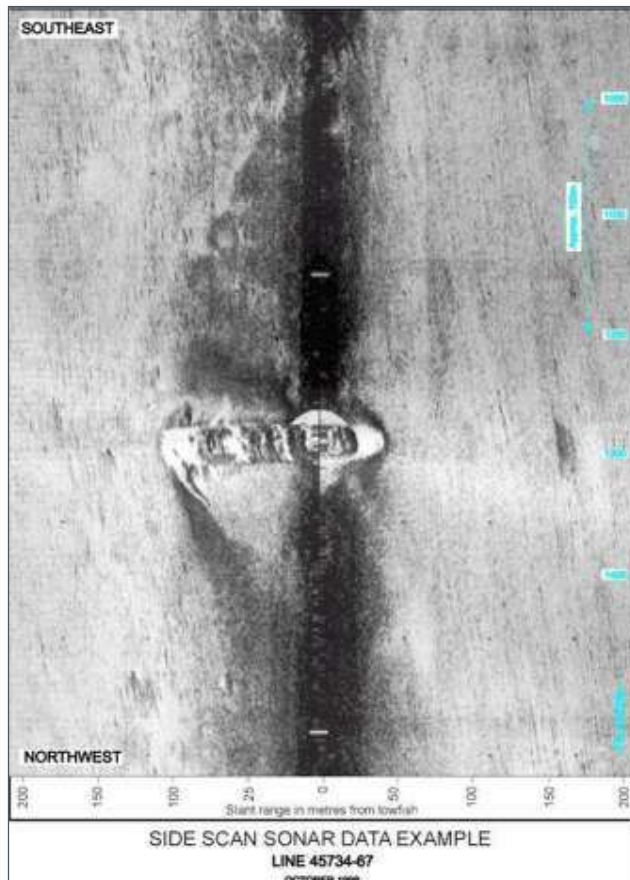


- Towing grapnel that hooks into wreck

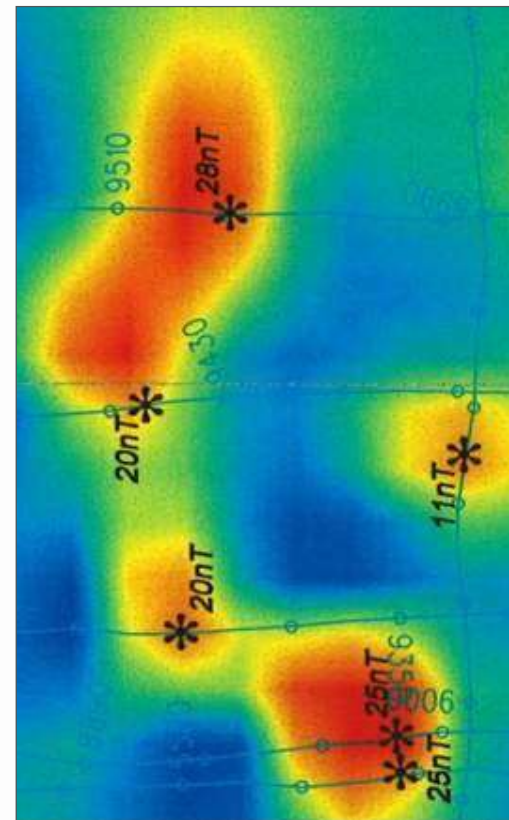


Sonar and Magnetometer

Side-scan sonar



Magnetometer



Summary

Safer and more enjoyable to have prior knowledge of the wreck site

- Researching the wreck can take you to many sources and it can be a lot of fun
- Use and interpret the knowledge gained
- Use and practice the positioning and confirmation of location techniques for effective wreck location