

Week 16

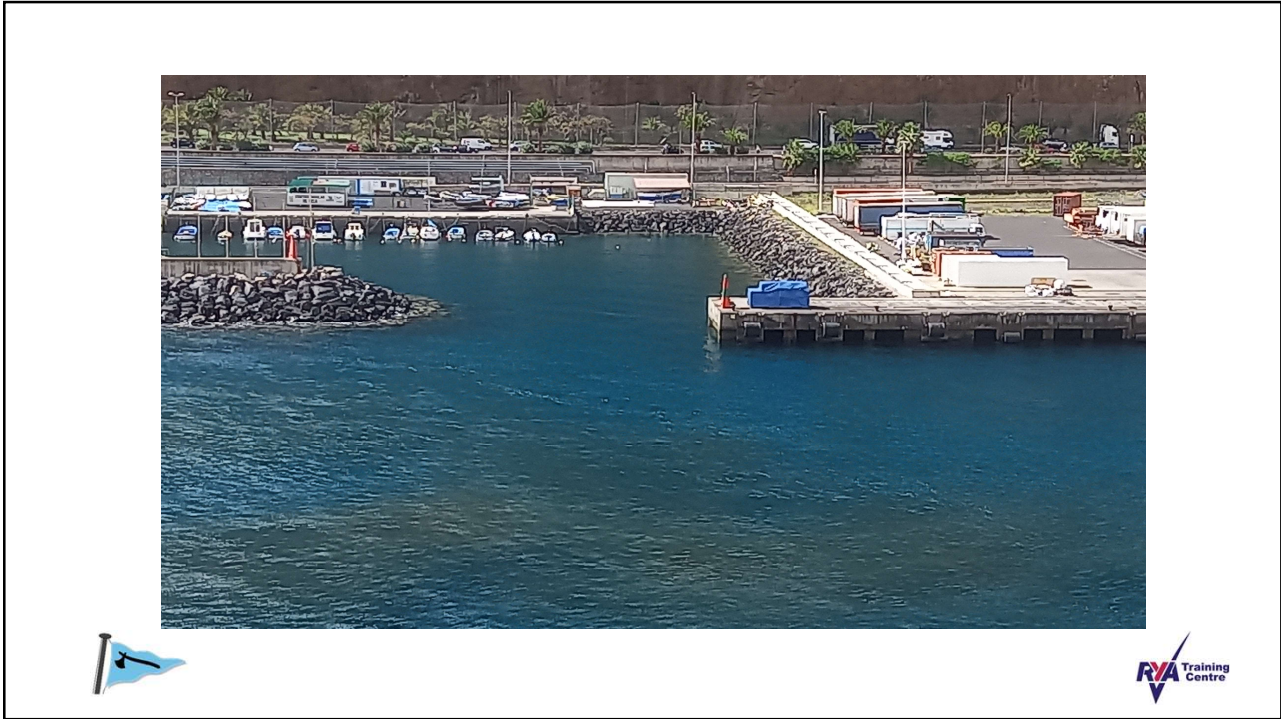


1

Found one!



2



3



4

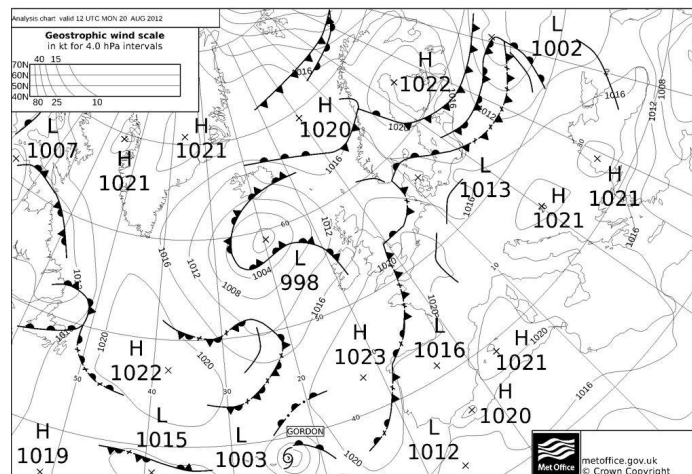
Interpreting Forecasts Ex

Course Exercise Book – p19
Weather Booklet

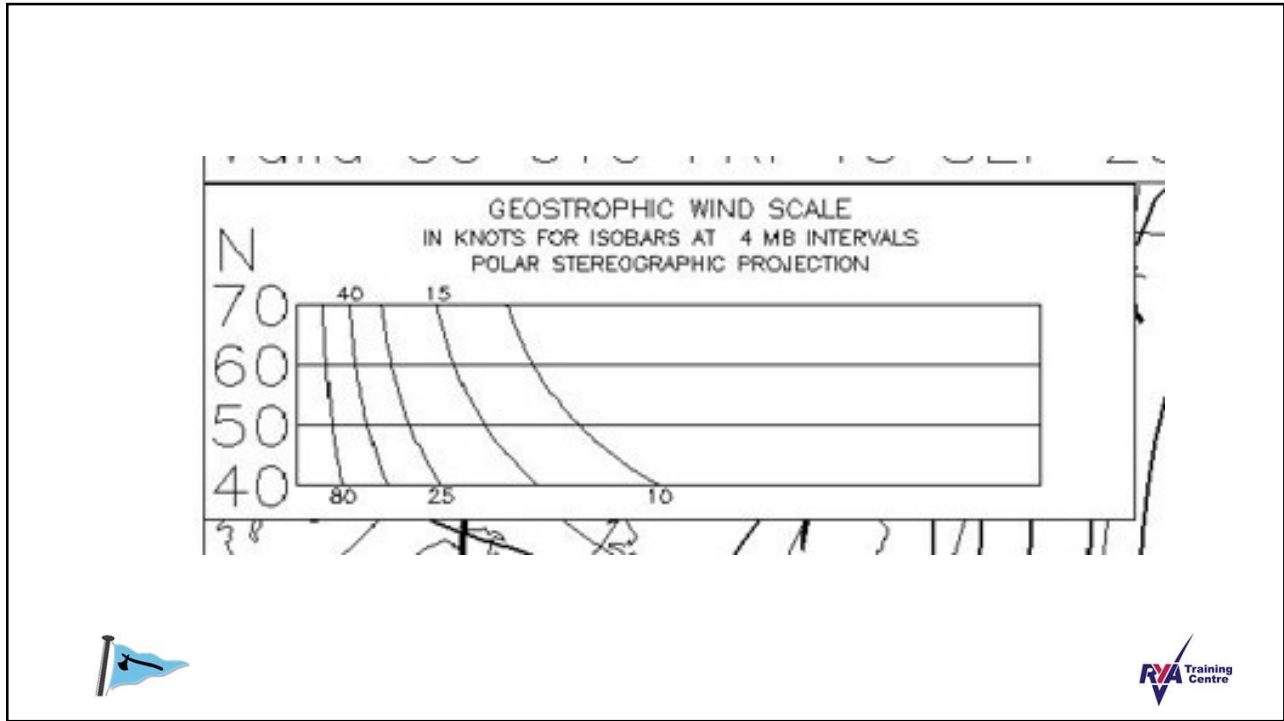


5

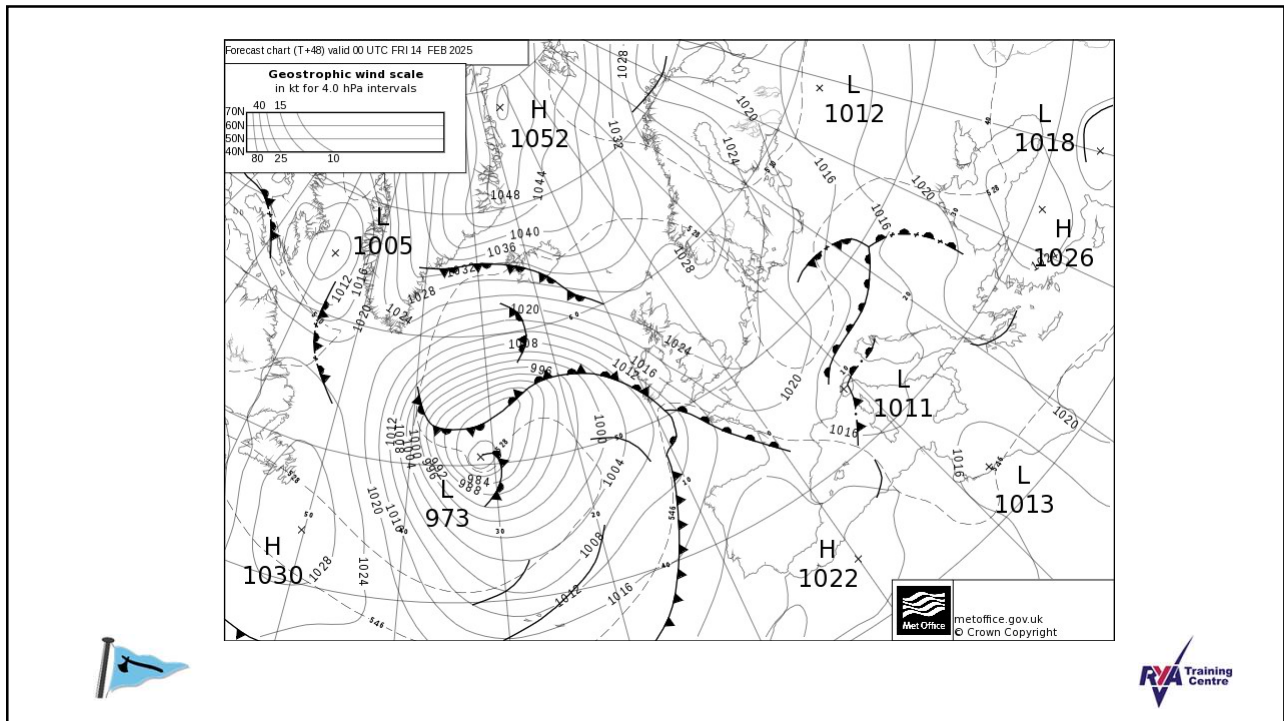
Geostrophic Scales



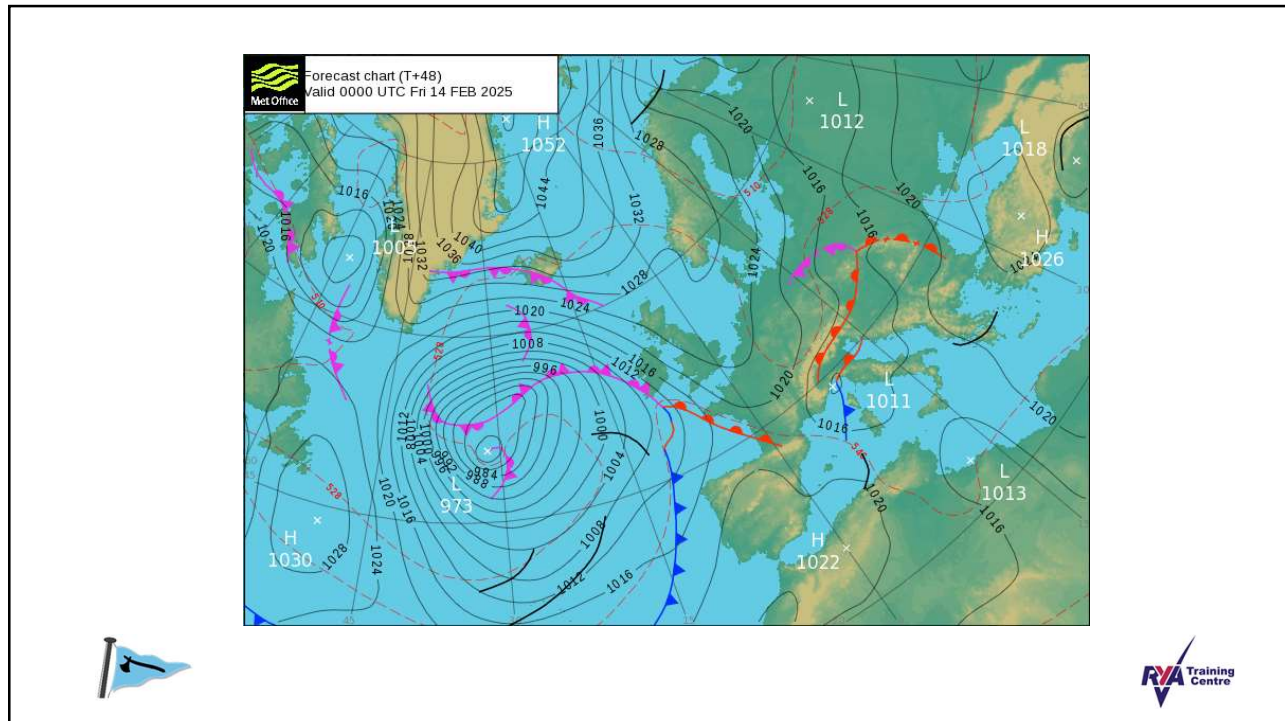
6



7



8



9

Fri 14 Feb
7° Maximum daytime temperature: 7° Celsius; 6° Minimum nighttime temperature: 6° Celsius;
Sunrise: 07:26
Sunset: 17:27
 Light rain changing to overcast by early evening.
 LUV
 LPollution
 No pollen data.
First high tide: 07:53 for

Time	00:00	03:00	06:00	09:00	12:00	15:00	18:00	21:00
Weather symbols								
Chance of precipitation	40%	60%	70%	70%	60%	60%	50%	40%
Temperature (°C)	5°	5°	5°	5°	6°	6°	6°	6°
Feels like temperature (°C)	0°	0°	0°	0°	1°	1°	2°	3°
Wind direction and speed (mph)	ESE17	ESE19	SE19	SE19	SE19	ESE17	ESE14	ESE13
Wind gust (mph)	31	33	34	34	31	26	23	23
Visibility (description)	VG	VG	G	G	G	G	G	G
Humidity	77%							

10

Friday 14 February

	Wind	Gust		Swell	Period		Rain	Cloud	Temp	Chill	[Wind rating]
00:00	19kts	23.9kts	↙	1.6m	5.4sec	☁	0mm	75%	7°C	0°C	● ●
03:00	18.8kts	23.7kts	↙	1.7m	5.7sec	☁	0mm	58%	7°C	0°C	● ●
06:00	18.4kts	23.8kts	↗	1.8m	5.9sec	☁	0.9mm	64%	6°C	0°C	●
09:00	19.1kts	24.4kts	↗	1.8m	6sec	☁	1.7mm	67%	6°C	0°C	● ●
12:00	19.1kts	25.3kts	↗	1.9m	6.1sec	☁	2.7mm	64%	6°C	0°C	●
15:00	16kts	21kts	↗	1.9m	6.1sec	☁	0.5mm	61%	6°C	0°C	●
18:00	15.1kts	20.6kts	↗	1.8m	5.9sec	☁	0.8mm	71%	6°C	0°C	●
21:00	14.6kts	20.7kts	↙	1.7m	5.6sec	☁	0.1mm	75%	7°C	1°C	●

☀ Sunrise: 07:23 / Sunset: 17:29 🌆 Twilight: 06:49 / 18:03

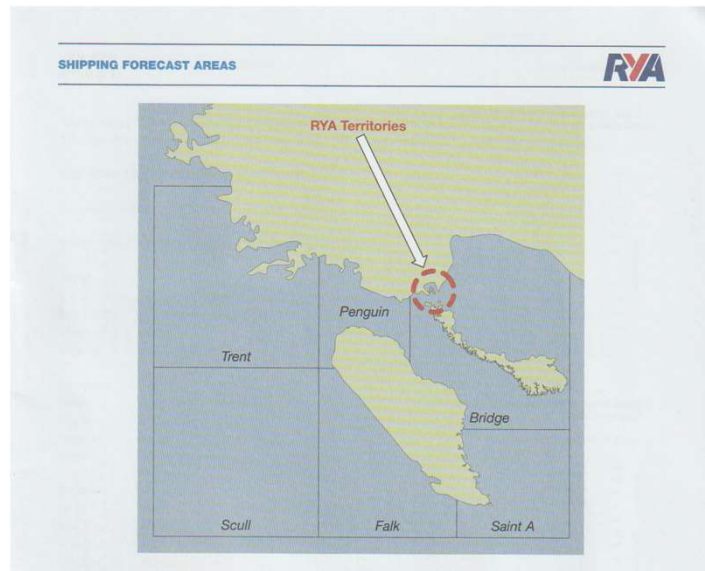
<https://bigsalty.com/en/weather/forecast/426/>



11

Geography

Weather Booklet
p3



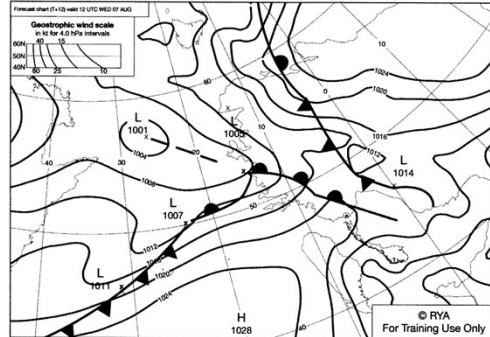
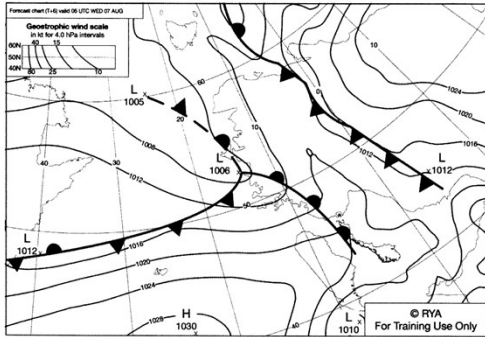
12

Question 2

SYNOPTIC FORECAST 7TH AUGUST 0600 ZULU



SYNOPTIC FORECAST 7TH AUGUST 1200 ZULU

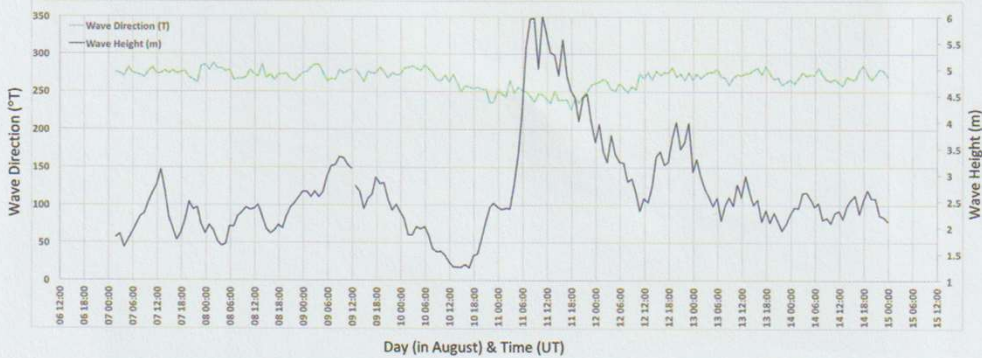


13

ODAS Buoy Wave Height

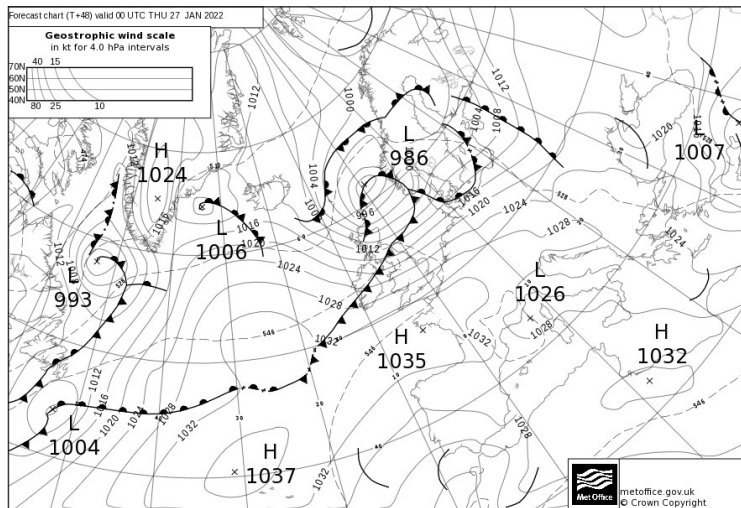
Point: ODAS at 46°17.800'N 6°16.430'W
Historical Data

Wave Direction/Wave Height



14

Geostrophic Scales



15

Passage Planning 1



16

WHY?



17

St Kilda to Port Fraser

What planning do we need to do?



18

SOLAS – Regulation 34

- The Master shall ensure that:
 - The voyage has been planned using appropriate charts and publications
 - The route for the voyage has been identified
 - His decision is final in terms of safe navigation and protection of the marine environment



19

MCA



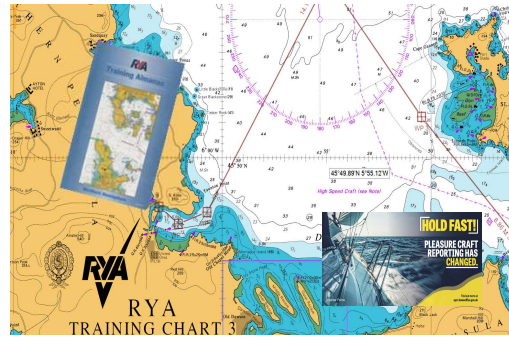
- Suggested content for a small craft passage plan:
 - Up to date weather forecast
 - Tidal predictions
 - Limitations of boat and crew
 - Navigational dangers
 - Contingency plan
 - Details left with a responsible person ashore
- Evidence?



20

Passage Planning Process

A Appraisal
P Plan
E Execute
M Monitor



21

Appraisal Factors

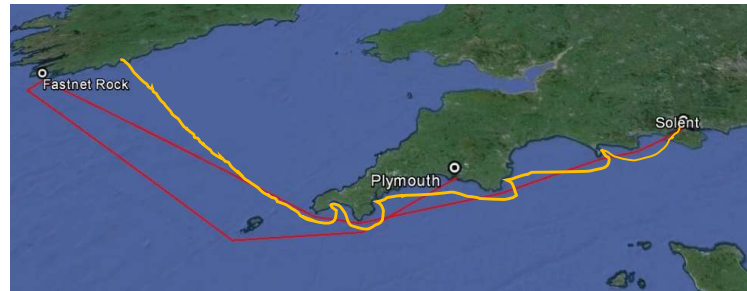
- Objectives
- Constraints
- Hazards
- Aids
- Route



22

Objectives

- Where to
- How to get there



23

Constraints

- Capability of vessel and crew
- Sunrise / Sunset
- Tides – access to mooring
- Locks and Swing Bridges
- Tidal Streams / Gates
- Fuel carrying capacity
- Traffic Separation Schemes



Southern Marinas' tidal gates up at low water
Photo: Michael Hooper



24

Hazards

- Rocks and Shallows
- Weather
- Visibility
- Wind and Sea State
- Overfalls
- Special Operations – Danger areas etc
- Shipping Density / TSS



25

Aids

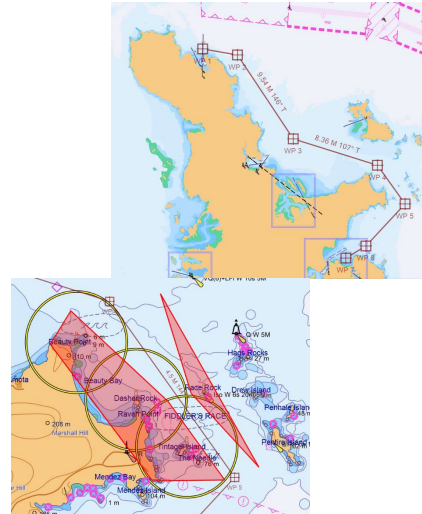
- Those things which are going to help you achieve your objective
- Physical
 - Land features
 - Buoyage
- GNSS



26

Planning

- Bolt Holes
- Planning on paper
- Waypoints
 - Route first – waypoints added to route
 - Not on objects
 - Easily confirmed visually
- Planning on screen
 - No go areas
- Pilotage Plans
 - for departure and arrival ports



27

Tactical Planning

- Tides / Tidal Gates
- Wind
- Lee bowing
- Steer towards shift
- Close the coast on port tack
- Cone / Corridor beating towards a point
- Lay lines
 - Use of GPS



28

Regulations

- Ports of Entry
- Documentation
- Clearance Procedures

CERTIFICATE OF BRITISH REGISTRY	
REGISTER OF BRITISH SHIPS PART III The Merchant Shipping Act 1995 The Merchant Shipping (Registration of Ships) Regulations 1993, as amended This Certificate is not proof of legal ownership	
DATE OF EXPIRY (DD-MM-YYYY)	REGISTRATION NUMBER
27-06-2019	SSR07301
DETAILS OF SHIP	
Description : SAILING YACHT	
Overall Length : 8.03 metres	
Number of Hulls : 1	
Name Of Ship : RAOUL DEVOS	
Hull ID Number : N/A	
DETAILS OF REGISTERED OWNERSHIP	
[REDACTED]	
I, the undersigned acting on behalf of the Secretary of State, hereby certify that the details of the ship and registered ownership listed on this Certificate are in accordance with the Register of British Ships Part III (Small Ships Register). This Certificate is valid from:	
DATE	21/05/2014 <i>Heave!</i>
Page 1 of 1	
<small>MSF 4706 Rev. 1/07 For and on behalf of the Registrar General of Shipping & Seamen</small>	



29

Storing and Provisioning

- Fuel
 - Enough for the voyage
 - Reserve
 - Not all in one tank
- Water
 - Depends on climate but around 2 - 5 litres per person per day.
 - Separate tanks / carriers
- Food
 - Sufficient / type
 - Ease of cooking



30

Execute



31

Monitor

- Log
 - Position compared with prediction
- Weather
 - Compared with forecast
- Engine performance
 - Temperatures, oil pressures, fuel consumption
- Crew welfare
- Change of Plan?



32

Homework

- Exercise “Interpreting Forecasts” p19 – Remaining questions.
- Complete by 5 Mar.

