

Week 14



1

Meteorology 2

Cloud Types and Low Pressure Systems



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Cloud Types

<u>Root Name</u>	<u>Description</u>
Cirrus	High wispy clouds
Stratus	Layers of flat clouds
Cumulus	Heaped or lumpy cloud
Nimbus	Rain or Snow bearing



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Cloud Types

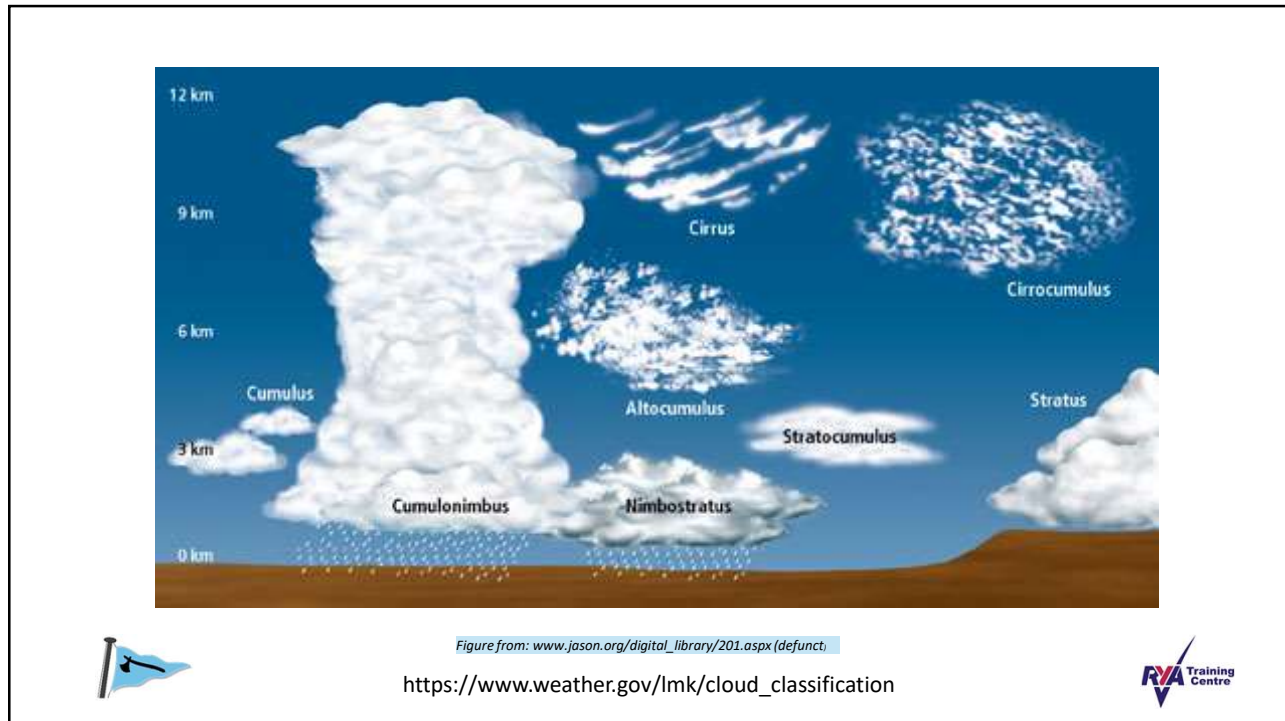
<u>Layer</u>	<u>Name</u>	<u>Height Band</u>
High	Cirrus Cirrostratus Cirrocumulus	>5000m
Medium	Altostratus Alto cumulus	2000 – 5000m
Low	Stratus Stratocumulus Nimbostratus Cumulus Cumulonimbus	<2000m From low level to tropopause ~ 12km



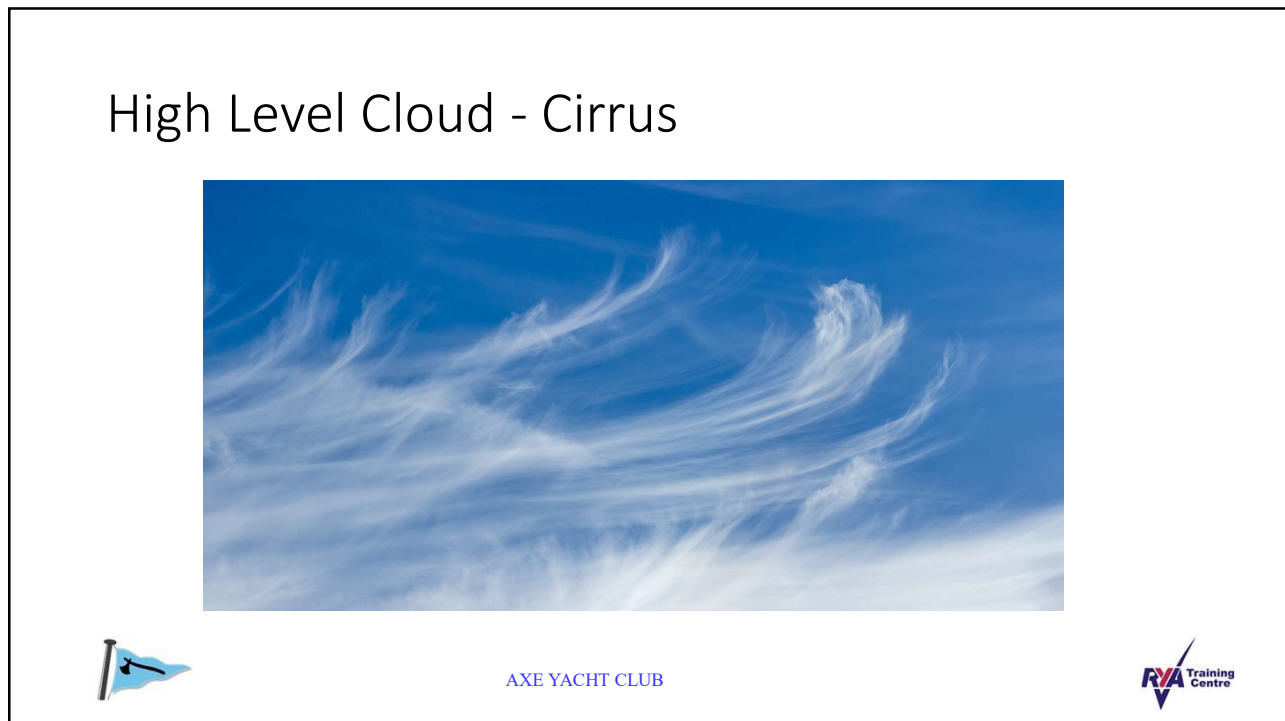
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Mid Layer - Stratus



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Low Level - Stratus



4 Warm sector low cloud and mist.

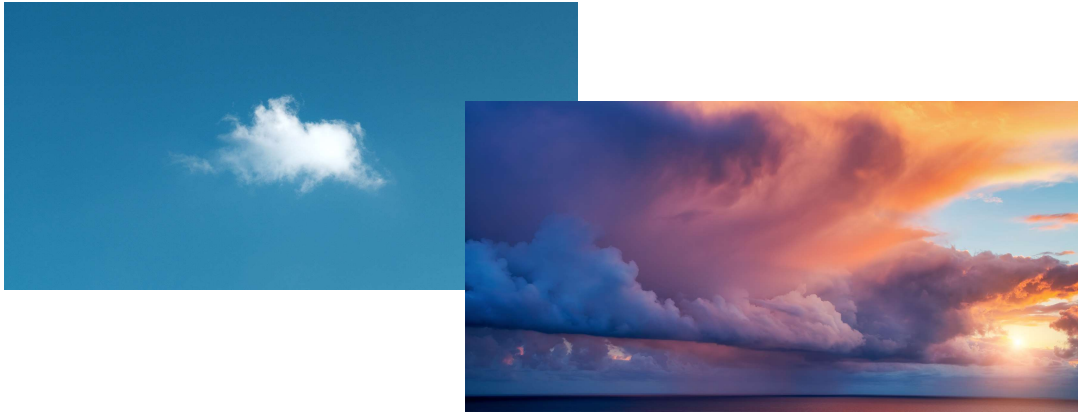


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Cumulus and Cumulonimbus



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Atmospheric Pressure

Atmospheric pressure is:

- Measured with a barometer
- Measured in *millibars (mb)*

Sailors are normally interested in how the pressure is changing.



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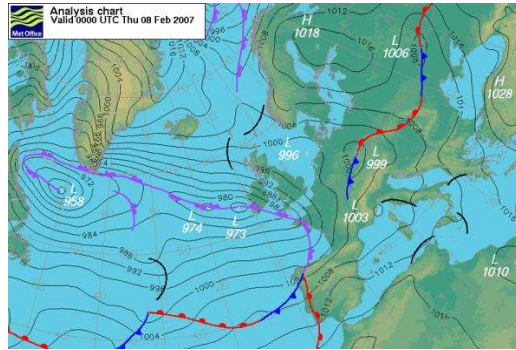


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Synoptic Weather Charts

Isobars are used to join points at the same atmospheric pressure (c.f. contour lines on OS maps).

Isobars are normally at 4mb intervals.

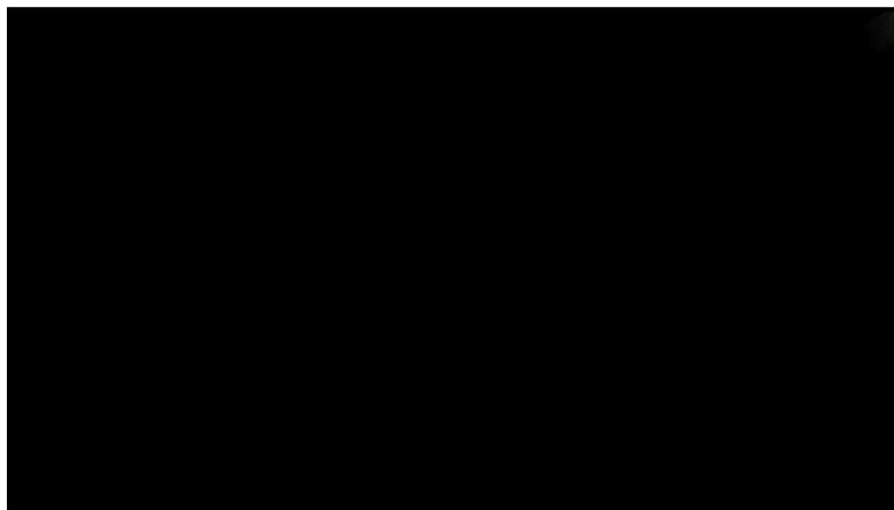


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Interpreting Synoptic Charts



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BUYS BALLOT'S LAW

Low Pressure

992	1000	1008	1016	1024	1032
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High Pressure

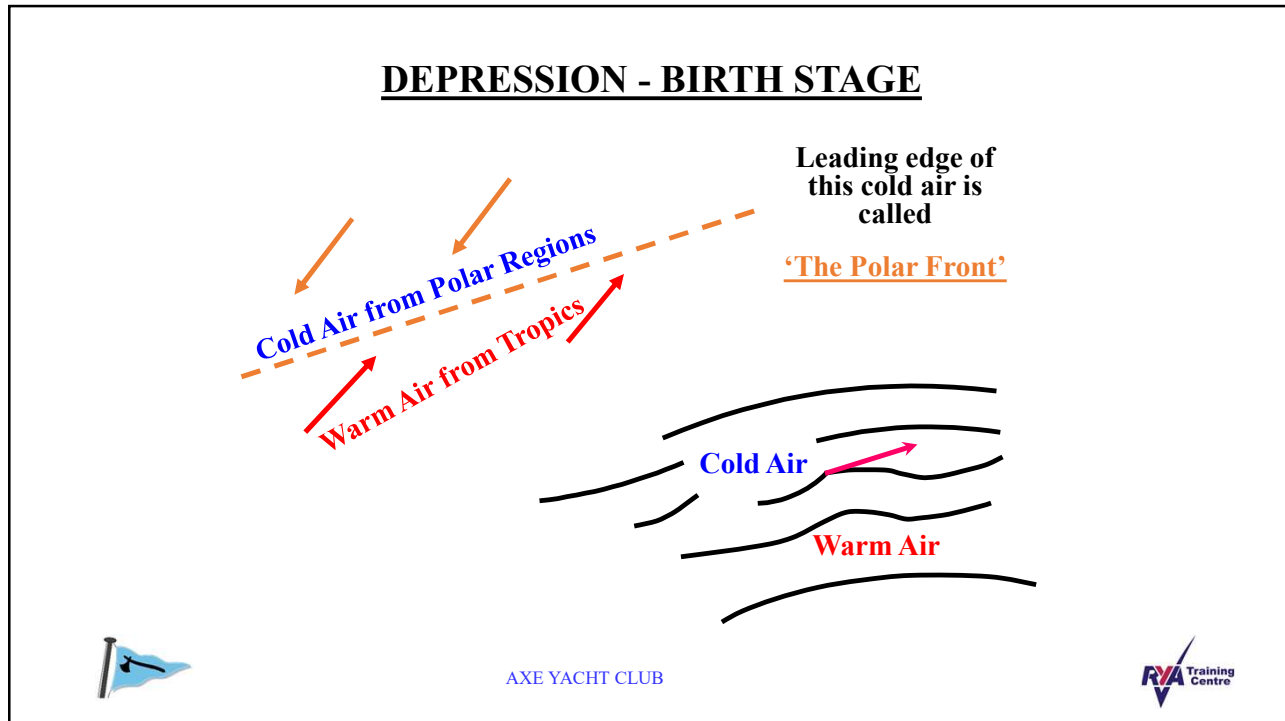
Buys Ballot's Law
 In the Northern Hemisphere,
 if you stand with your back
 to the wind, the
LOW PRESSURE
 area is to your left

AXE YACHT CLUB

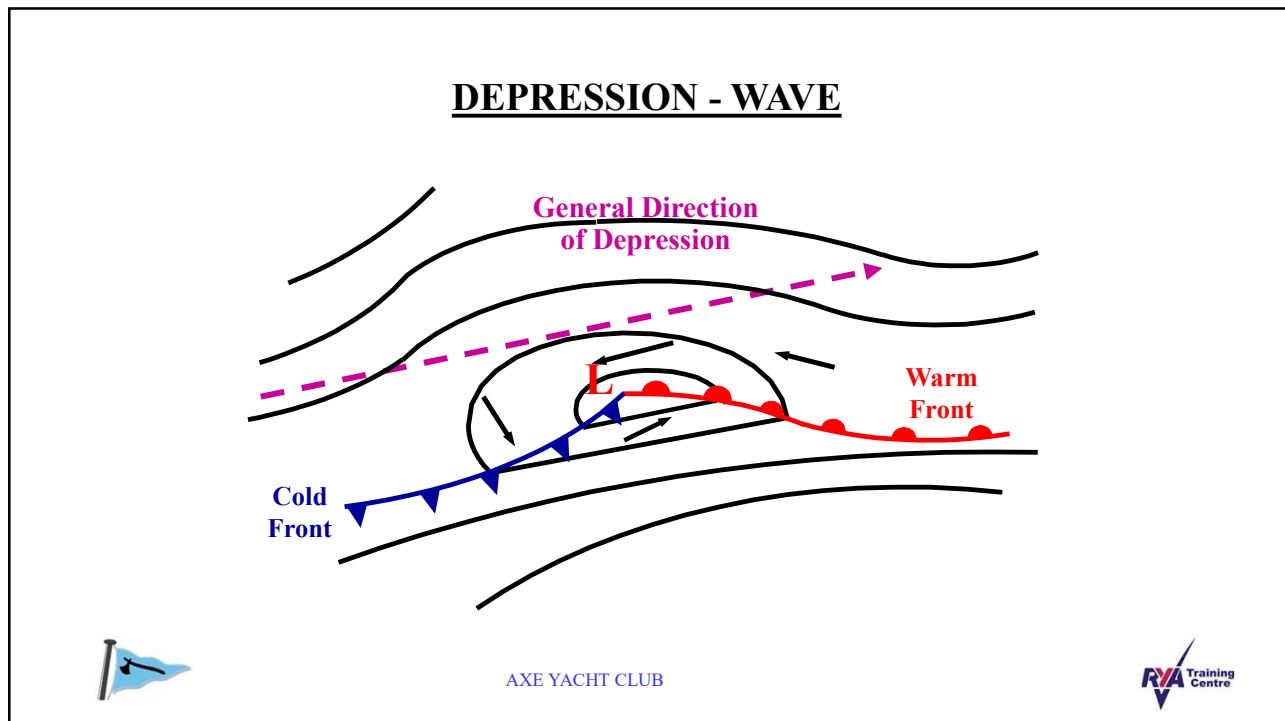
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Low Pressure Weather System

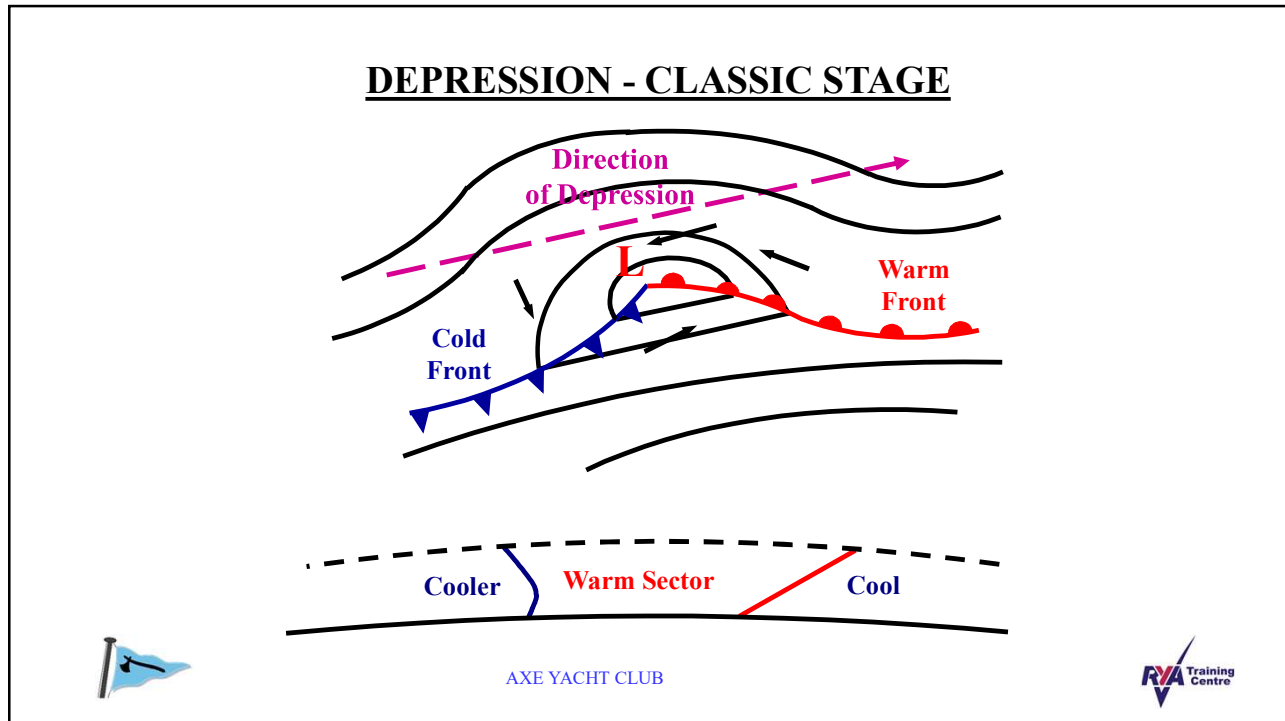
14



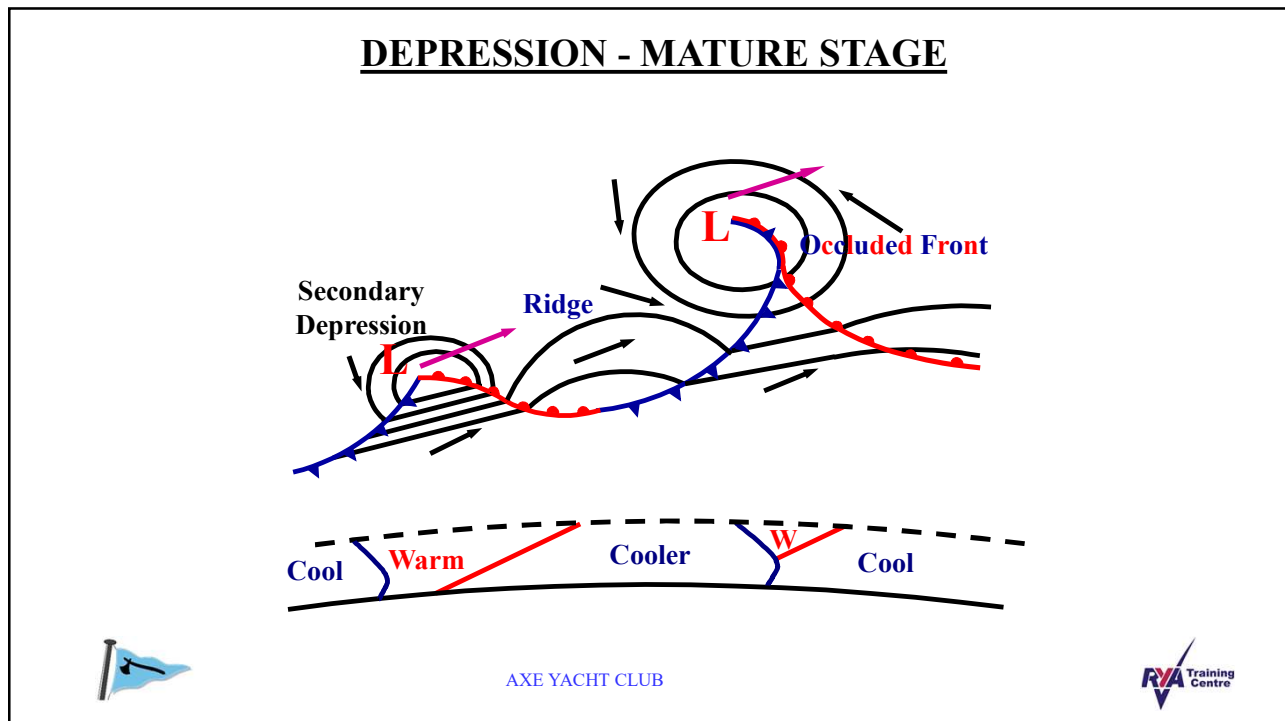
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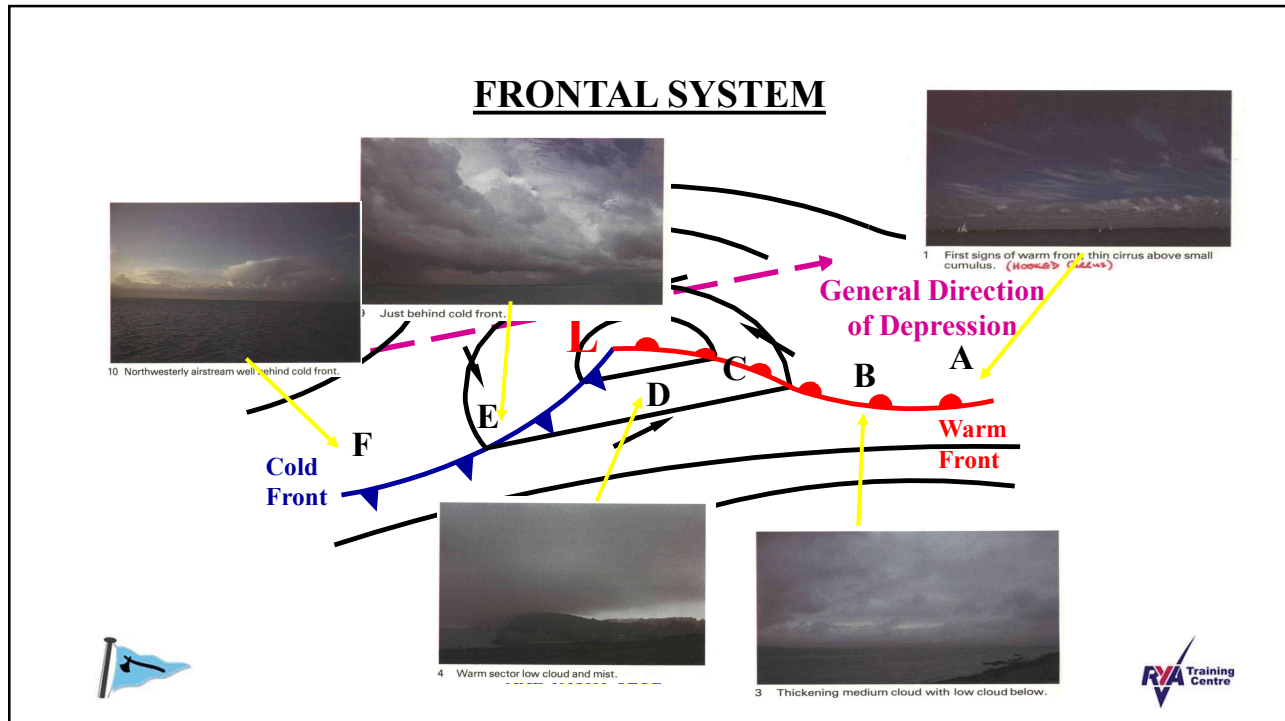
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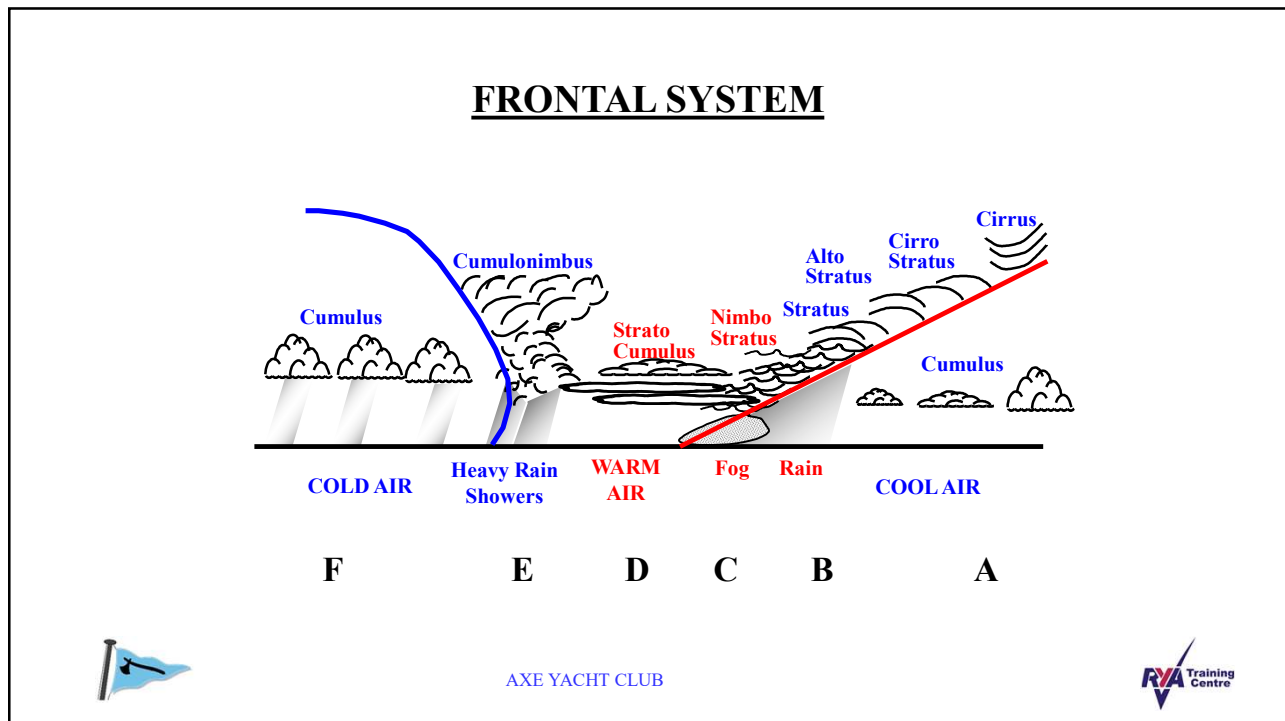
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Homework for completion by 23 January

Exercise – **Course to Steer**

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Send answers and workings to
David

Keep plots on the chart
(transparency available next
week)

