

## Summary Of Weather Conditions

A summary of the weather conditions associated with the passage of the whole frontal depression system illustrated is as follows.

### Warm Front

The approach of a warm front is characterised by the following:

- direction and speed of approach is generally towards the east at less than 20 kt;
- cloud developing well ahead of the front, thickening and lowering as the front approaches;
- wind from the north-east;
- barometric pressure falling; and
- rain beginning 150 nm ahead of the surface position.

Passage of the warm front is characterised by the following:

- wind backs around to the north-west;
- rain eases and stops;
- cloud clears to the south-east;
- temperature rises;
- relative humidity decreases; and
- barometric pressure steadies.

### Warm Sector

In the warm sector, the amount of cloud depends on the temperature, humidity and lapse rate of the air mass in the region. As might be expected in the warm sector, the actual temperature tends to remain fairly high, while the barometric pressure is generally steady.

### Cold Front

The approach of a cold front is characterised by the following:

- the formation of cirrus cloud, funnelling to the south west;
- general speed of advance of 15 to 50 kt;
- wind from the north-west, backing and strengthening;
- temperature increasing, especially in summer;
- barometric pressure falling; and
- cumulus and possibly cumulonimbus with increasing rain.

The passage of a cold front is characterised by the following:

- wind backs to south-west;
- temperature falls;
- humidity rises;
- pressure starts to rise;
- possible thunderstorm/squall; and
- low cloud.

### Behind the Front

Once the front has passed, there is normally a fairly rapid clearing if the slope of the front has been steep. However, over the sea, clearing showers may occur if the air behind the front is moist and unstable.