It's all about lift

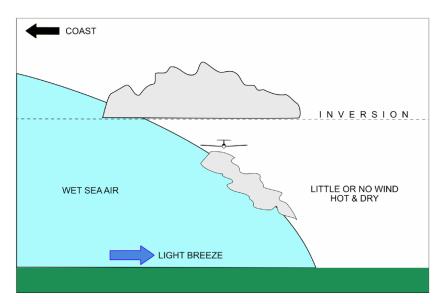
Chris Bryant, chris@palanquin.plus.com

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Sea breeze fronts

This is something we get occasionally in the UK on hot summer afternoons and are enormous fun. Because we are an island, nowhere is far from the sea. In the anti-cyclonic conditions necessary for sunny weather, there is little wind day or night and air can flow from the land to the sea overnight. This is because the sea retains its heat better than the land and tends to be warmer than the land at night.

Conversely, after a good morning soaking in sunshine, the land gets to be warmer than the sea and air can flow inland, slowly pushing up the already very warm air it finds there into a low level front that is usually soarable. What is more, you can often see it because cloud may form on its slopes. So if it is a hot day, not far from the sea, the thermals have been dismal or non-existent and it is getting to be midafternoon, look towards the sea for signs of low light cloud in a line roughly parallel to the distant shore. Look again in five minutes time and if the low cloud has got nearer you may be in for a nice surprise. Sometimes these sea breeze fronts are faintly visible on radar because they can suck up lots of insects which can attract flocks of birds.



Sea breeze front

Sometimes you can see the slope if you look at it at a fine angle because it may be rather dusty. Most of the ones I have seen never went higher than a few thousand feet and moved forward in pulses. They can be several miles long, however. Because the air in them is wet, there are no thermals on the seaward side. Once the front has passed your position the air is dead. Sea breeze fronts have been known to persist late into the evening long after all other activity has ended. By then they can be over a hundred miles inland. You soar one of these as if it was a hill, cruising up and down in moderate lift. Of course, nothing is for ever. While you cruise away from your home site on this seemingly endless magic carpet, climbing gently until the lift runs out, when you turn round to come back, the sea breeze may have disappeared, either through exhaustion or by moving on in

a pulse that takes it much further inland. They usually move quite slowly averaging a few miles per hour.