

## **Fabulous Cross – Country Opportunities from Benalla by Charles Day**

The opportunities for long, fast and scenically varied cross – country flights are excellent, perhaps unrivalled in Australia. The cross – country season is from about mid – October to early April. There is something to challenge pilots of all levels of experience, from those undertaking their first sallies away from the security of the local soaring area to accomplished pilots achieving over 1,000 km. The longest flight from Benalla is over 1200 km by the current World Open Class Champion, Michael Sommer. The 1987 World Championships and many Australian national championships have been held at Benalla.

Broadly speaking, the terrain to the north and west of Benalla is limitless plains, with excellent out-landing conditions, whereas that to the east and south is hilly, with generally adequate out-landing opportunities, apart from some patches of forest that need care in crossing. Hills of the Great Dividing Range rise to 5,900 ft, at Mt. Buller, 70 km SE of Benalla, to 6,500 ft in the Mt. Bogong to Mt. Hotham area about 110 km in the eastern sector from Benalla and 7,200 ft at Mt. Kosciusko, the highest mountain in Australia, 200 km E of Benalla. This dividing range effectively insulates Benalla from all sea breeze effects. Very occasionally, bold pilots may cross the dividing range as far as the Victorian coast, about 250 km. S or SE of Benalla, or fly beyond the Snowy Mountains to Cooma, about 280 km E of Benalla.

Task setting is generally a balancing act to select terrain that the pilot is comfortable with, coupled with the best thermal conditions predicted by experience and our various computer – based forecasting aids. Usually task – setters steer pilots towards the hottest areas and those with the highest probability of having cumulus clouds. The hilly areas often have cumulus when the plains are blue.

The main irrigation areas are generally avoided in seasons following a wet winter and spring, when the farmers have a large allocation of irrigation water over the summer. These localised areas are mainly to the W and N and are easily avoided. In dry years, such as the 2000 to 2010 drought period, irrigation areas have no adverse effect on thermal strengths.

The most popular task direction is to the north (particularly for competitions), followed by trips to the eastern ranges, then west and, lastly, to the south.

To give a general picture of a summer weather cycle, the following is a simplified account of the most common sequence of events.

A cold front clears Benalla from the west, leaving a S to SW cool unstable airstream with cumulus up to 6,000 ft. in its wake as the next high pressure cell approaches. This often yields a fair day for tasking in any direction except south, but cumulus may dry out to the north as the airstream gets further from the south coast.

The airstream can then dry out and stabilise rapidly by the next day, resulting in a poor, blue day with a S to SE wind.

As the high – pressure cell advances further east, the wind gradually backs through E to NW, with temperatures rising and conditions improving over several days. The incidence of cumulus increases and convection depth increases to perhaps 10,000 ft, even 13,000 or more occasionally. These are potentially the 750 and 1,000 km days and can have a soarable period as long as nine hours. A trough line to the N or NNE can form which offers wonderful cloud streets.

High cirrus ahead of the next cold front then starts to spread over the area from the west and the next cycle commences. (Warm fronts are virtually unknown.)

Occasionally, a tropical low spreads southward towards Benalla from the north. These events bring hot, humid air and extensive middle level cloud, but fortunately they often stop their southward progress well clear of Benalla and still allow useful tasks. In such situations gliding sites further north can be badly affected.