

Soaring Australian Thermals

The Collected Papers of
Garry Speight
from 1966 to 2015



Water Ballast

By Garry Speight

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Dear Sir,

I would like to thank Maurie Bradney for his comments on my article about the use of water ballast. I was very gratified to find that a pilot of his talent and international experience thought that it made sense, as the effect of ballast on thermal search range does not seem to have been discussed before.

I agree with Maurie that a pilot who can increase the thermal density on his track by superior skill in locating lift has an enormous advantage, although I believe this is a part of MacCready flying, not something separate from it.

The only point that I had intended to make about dolphin soaring was that a pilot is not likely

to reason as follows: "The lift won't be strong, but there are likely to be cloud streets: that means dolphin soaring, so I'll load up ballast". I believe that most gliders will make better speeds if they are loaded to the legal limit on any reasonably soarable day, regardless of whether the day offers especially good prospects for dolphin soaring.

Flatter glide angles permit more extended use of dolphin soaring, and it may well be that Herbert Pirker's calculations are relevant to the optimal wing loadings for super-ships. Perhaps they should be designed for rather higher wing loadings than current standard class gliders that need to stop and circle more often.

I was very sorry to hear of Maurie's accident, and I would like to wish him a speedy recovery.

Garry Speight O'Connor, ACT



Garry (third from left) with 1992 course participants