

The 5 methods for thermalling – Pat Dower

The key to being a really great thermaller in all situations is to be adaptable. I like to think of 5 distinct methods for thermalling and choosing the right one will help you climb efficiently. Early in your flying career you will need to be very conscious of selecting the right method, but as you gain experience it becomes more and more automatic. That said, I know some really good XC pilots who seem to lose their edge in certain conditions; perhaps they need to look again at the five methods!

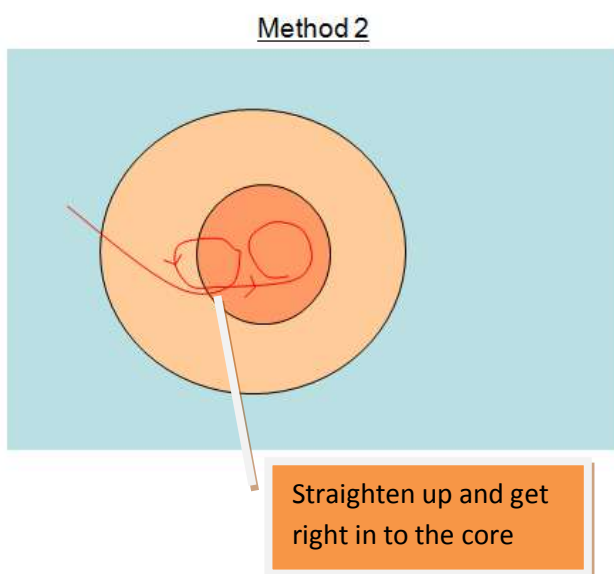
The basic principal is to aim to do 360s which keep you in the best lift, as much as possible. Sounds simple doesn't it?

Method 1 - "Count and Turn"

Fly into the lift, count for about 4 seconds, commence 360° turns. This is a straight forward basic technique; a great way to start your thermal career and always useful in strong narrow cores.

Method 2 – "Shifting Circles"

Gets you centred on the best lift, by building on method 1. If you notice that half of your 360 is in poorer lift, you shift the 360 towards the better lift. As you turn back into the stronger lift, straighten up for a second or two and recommence 360s.



How tight should your 360s be?
Answer: tight enough to stay in the good lift. If you are in and out of the best lift, see if tighter turns can keep you in.

Warning: the tighter the turn the greater the sink rate of your glider, so there is trade off!

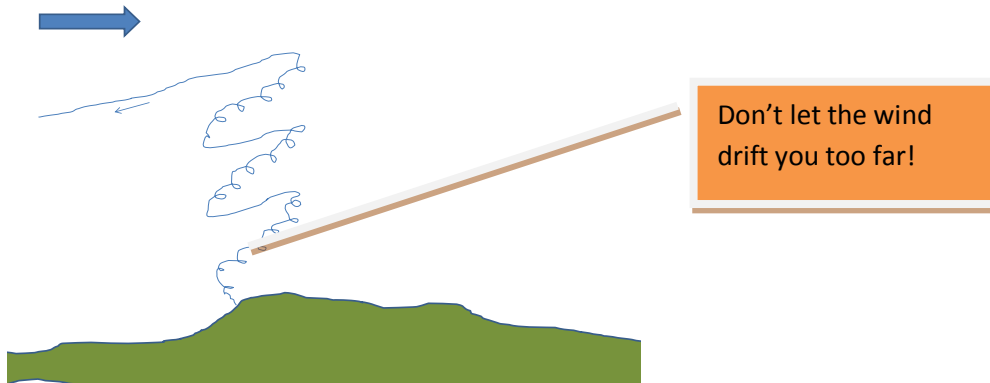
Method 3 – "The Step Climb"

A really good for gaining height whilst staying over a major trigger such as ridge, even when the wind is blowing you away. A vital method for getting high in readiness for a big into wind transition. Instead of doing regular 360s, extend the into wind part of the 360 briefly before completing the

Guide to thermalling

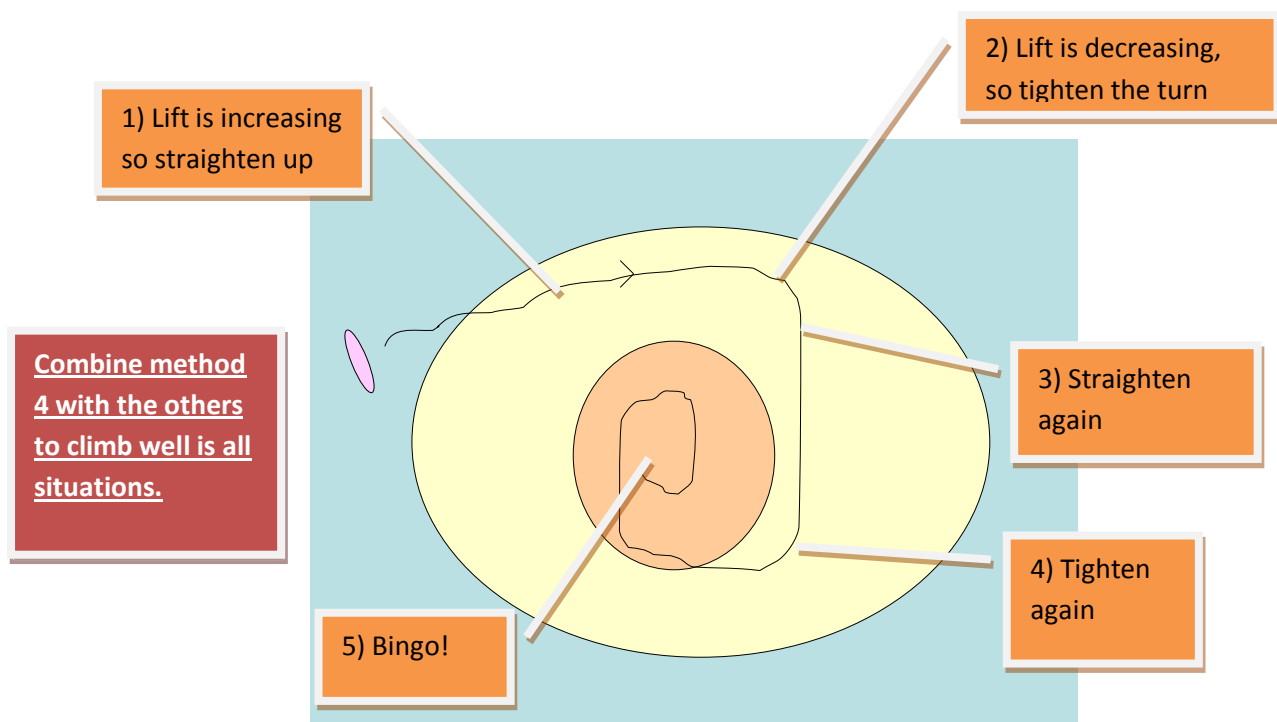
next 360. The true step climb actually involves drifting for a few 360s before making a longer into wind glide to hopefully connect with the next thermal pulse from your chosen trigger.

Big steps for light wind, small steps in strong wind...



Method 4 – “The Flat Land Genius”

A miracle method for finding the cores in large thermals, which helps to stop you over-banking and losing efficiency. As you fly into lift, keep flying straight. As the lift strengthens keep straight, so long as the lift is even on both sides. If the lift is stronger to one side, gently turn towards it. As you reach the peak of the lift, get ready to turn or tighten up if you are already turning. Once the lift starts to lessen, tighten the turn; this has the effect of turning you back to the better lift. You should now be flying into better lift so open out the turn. This stops you turning back out of the best lift.



Method 5 – “Grim Determination”

The fall back method to try in really broken thermals, where you just can't do 360s in lift, without falling out. The vital element is that you turn tightly on the best lumps of lift, even if it's only quarter of a turn. Straighten up in the sink; turn again in the lift. Constantly evaluate your climb using your altimeter or averager. Sometimes method 1 or 2 will beat it, sometimes not!

Turning your glider efficiently

Staying in the best lift is paramount. So much so, it is nearly always worth sacrificing smooth flat turns, so long as you stay in the core. It is only in larger areas lift, that efficiency becomes really important.

The ideal technique will depend on your glider as well as the conditions, but as a starting point:

- Fly your turns a bit slower than trim but well above min sink. This will give reasonable manoeuvrability and keep you well away from the spin/stall point.
- Once you are turning nicely, ease on a little outside brake. Note too much; just enough to take up the slack in the brake line plus a few cm extra. This will help reduce dive in the turn and keep you in touch with the outer half of the wing. If you want to tighten your turn, the easiest way is let up on the outside brake.
- Use a little weight shift into the turn, especially when you initiate the turn. Beware though; some gliders actually lose less height when you don't weight shift.

Good luck; see you at cloud base!

Pat Dower (2012)

Pat runs pilot development days and courses, talks, workshops and coaching for pilots of all levels (CP to elite).

Whether you are interested in your individual development or doing something with a club/group; we will be able to design a programme for your needs.

See: www.patdower.co.uk