## Anatomy of an XC

I've considered doing something like this for a while, but always been reluctant to do so. It feels a little like putting one's neck on the block when there are so many far better pilots out there and some could read this with a wry smile and shake of the head. I'd be mortified. So – to get my elephant firmly established in the room! I love cross country flying – all aspects of it from the planning, the anticipation, the knowledge and skills required, the chance element but, above all the buzz of the unknown and the sheer adventure it entails – and that includes getting back afterwards. However, I am not a natural in the mould of the xc stars of UK flying. I am a striver ...... I work hard for my flights, have a greater element of luck than I deserve and keep trying to reduce the number of mistakes I make. Truth be told, I actually enjoy still being on the steeper part of the learning curve as the rewards in many ways can be higher than on reaching the plateau. Above all I still I tend to travel in hope as much as expectation and in that respect I am probably like the majority of wannabee pilots in the UK XC League.

What follows is an attempt at the dissection of an xc flight. It is not meant to be simply a blow by blow account but, rather a more detailed personal insight into the thinking before, during and after. It's in part prompted by aspiring xc pilots asking for advice, but also to expose my own way of analysing my own flights and the day. I could have chosen any number of flights, but have selected this one as it's my most recent, so still fresh in my memory. It's also from a popular Dales site and follows a well flown route; one I've done quite a few times before and is neither too long, nor too short.

This flight was done on the 13<sup>th</sup> August from Dodd Fell and finished north of Ripon by the Lightwater Valley theme park. Point to point was 47k - 56k with turnpoints.

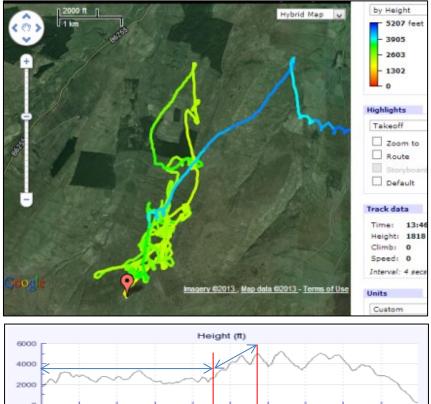
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**Background and weather**: Since the settled hot spell during mid-July, most of the UK had experienced unsettled conditions and flying opportunities were few and short-lived. The further north you lived the worse it was as cloudbase was lower and more wind had to be factored in. It was very much a case of grabbing what short slots appeared. Tuesday 13<sup>th</sup> was one such slot and remarkably according to RASP and other predictors, it centered on the Dales – or more especially the Vale of York. The downside was the window was quite short, maybe 3hrs at best before the VoY filled in whilst the Dales itself could suffer from a much lower base, weaker climbs and possibly be blown out for a paraglider. In common with a lot of promising UK xc days the morning didn't look that inspiring and on the drive into Hawes the trees were suggesting it was blown out. I did my usual binocular scan of the options with no sign of any gliders. I wasn't hopeful.

At the end of the Wether Fell track it was at the top end of acceptable, in other words it gave Dodd Fell just upwind enough chance to do its usual trick of being a lot lighter. Dodd is remarkable in this respect and time and again it proves the better of the two sites. As I launched at midday in a light to moderate breeze, the hang gliders on Wether Fell were willing it to abate. After an hour of reasonable flying, the sky had filled in, base was only about 3500' and I decided to land thinking I'd got something from the day. Driving away I met Dean who then persuaded me to return and keep him company – it was a close call as it just seemed like more of the same.

The flight (fishing and climb-out): I took off just ahead of Dean and for an hour and half little had changed. We fished the whole length of the ridge – sitting downwind of the cleared forestry areas, the wooded trigger lines and even pushing out to the ridge in front. Sunny patches were few and short-lived and our climbs rarely went much over 1200' ato (3000'asl). At this point it would be easy to give up or just go in and land for a break. However, more sunny patches were appearing upwind (photo below) but their progress was slow – still it was enough to suggest a change for the better so we hung in and it was to pay off.



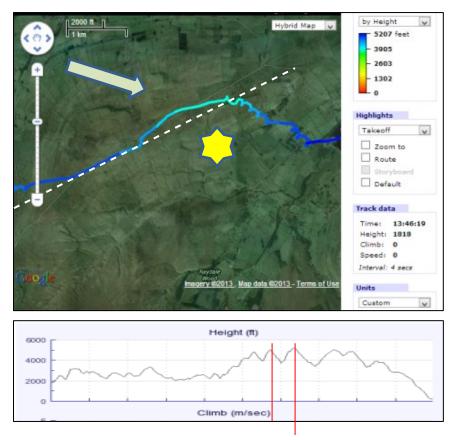


Climb (m/sec

3 hrs

50% of the total flight time was actually spent just fishing the ridge (diagram left). Very often it's not simply take-off, climb out and go. Persistence and patience is the usual order of UK flying and it can take time for the ridge or the day to get going. Dodd seems especially good at having those 'burp' moments and worth waiting for. Note the lee side cleared area in sun and trigger line. Check the time of climb out – it's now gone 3pm and getting late - RASP suggest the VoY may be closing down. It will take about an hour to get there. *Initially I set off for the sun/better sky* over Hawes (mistake) but changed my mind and headed back to obvious strong climb line.

Finding the second thermal: As is often the case with Dodd the climb out was very solid and obviously going to base. With Dean climbing equally well 200m way it indicated the lift was also quite extensive. Most pleasing was the jump in cloudbase over the past 30 minutes to a very respectable 5000'+. It's always a real joy to be climbing and easy to relax when they're solid and don't require too much working; but it's also the best time to be looking ahead and planning the next move. The thermal drift suggested I may have been better going more ESE over the moors but they looked too shaded out so I opted to run down the spine of high ground towards Semer Water ridge. The lee side was in sun, the opposite ridge has sharp breaks (crags) on the north side so trigger well and the bonus cloud just downwind suggested it was a pretty safe bet. Even the heavy sink was a positive indicator of what was ahead and I've learned to regard big downs as pointers to up's somewhere close – the trick is sometimes finding them. Having been sunk out behind Wether in the past (including twice in one day) I now avoid the direct route towards Addleborough and prefer to edge around it to the north or south. On this day it was my northern option.



3:45 pm - no time to linger!

The diagram shows the second climb (the one before is simply reestablishing over Wether Fell in the original climb out).

The ridge line along towards Semer is marked with the prevailing wind and SE sunny faces are also indicated. This climb, once established, provided a good time window to work out the options downwind. Better to do this on the way up to cloudbase than at base. If nothing obvious or you can't choose between two options then just hang around with your cloud until sure. A high base means more time and options than a lower base but may also indicate greater distances between lift. Equally a strong climb may dampen thermal development over a bigger area and expect strong sink if you leave it too early.

The middle stages (Past experiences helps): Having had a number of previous flights down the south edge of Wensleydale certainly benefits; including three earlier this year. The topography doesn't change, but you need to factor in the differing weather, condition of the ground and time of day. Essentially the thermal sources and triggers tend to stay reasonable constant – at least enough to improve your chances, so having an idea where these are puts you in the good places. On this flight they were pretty much where they should have been and this is both confidence inspiring and reduces the workload. Some would liken it to joining the dots – and to some extent it is. Flying and going xc from a new site can be harder work although the same rules of sources and triggers apply. It's always useful to get some inside knowledge by asking a local – they generally love to impress you with their knowledge. (Climbers were always big on 'sandbagging' but fortunately fliers are more open and honest with their knowhow).

The next stage is virtually a carbon copy of the first and the same thinking applies – a run down a triggering ridge before getting the climb to cross the next valley (Bishopdale) towards Penhill. The only question is at what point it triggers and on this day it was a fair way down towards Thoralby.