



# JOINT COACHING DAY

## Introduction and Development of Cross Country flying skills

**Lead:** Dave Ashcroft/Ed Cleasby  
**Contributing:** Ian Henderson

Dave Ashcroft (Chief Coach CSC)

Ed Cleasby (Chief Coach DHPC)

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Ian Henderson (Secretary CSC)



# Programme

## Admin.

- Lunch
  - Toilets
  - Fire route
  - Etc
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- Ask questions

### CSC/DHPC Joint Coaching Day

Hawkshead Brewery – 31<sup>st</sup> Jan 2015

9:15 (start 9:30am) – 4:30 approx

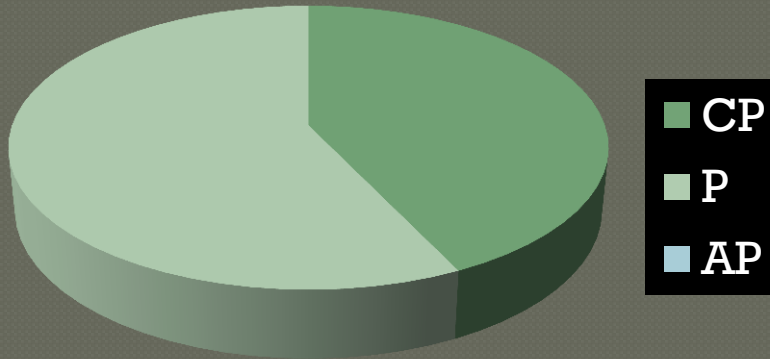
Outline programme (timings – approx.)

Timings	Outline	Lead
9.30 am - 10.00	Welcome, introductions. Aims of the day Programme and timings. Admin – meals, fire, toilets etc Group profile	EC/DD 30 min
10.00 - 10.45	Why fly xc? When are you ready? Key skills. Knowing your equipment and your area Preparing yourself mentally Day planning – conditions, site selection, planning flights.	EC 45 min
10.45 - 11.00	COFFEE	15 min
11.00 - 11.45	Mountain flying – close to hill and at height. Judging when to leave the hill. Selecting routes and thermals, reading clouds. Safety.	DD 45 min
11.45 - 12.30	Getting the best from your instruments. Navigation, airspace and communication.	IH 45 min
12.30 – 1.15	LUNCH	45 min
1.15 - 2.15	Flatland flying – reading terrain/ the sky. Sources and triggers. Judging clouds.	DD 60 min
2.15 - 3.00	Key decision points. Transitions – valley crossing, hill ground to flatlands, inter thermal. Speed to fly.  Post flight analysis. What you can learn from analysing your own and other peoples flights.	EC 45 min
3.00 – 3.15	COFFEE	15 min
3.15 - 4.15	XC profile – The Lakes } An overview of the nature of xc flying in each Area. The considerations, airspace, safety and typical stock routes. XC profile – The Dales }	DD EC 30 min/area
4.15 - 4.30 - 45	Plenary. Q and A discussions. Setting goals.	DD/EC

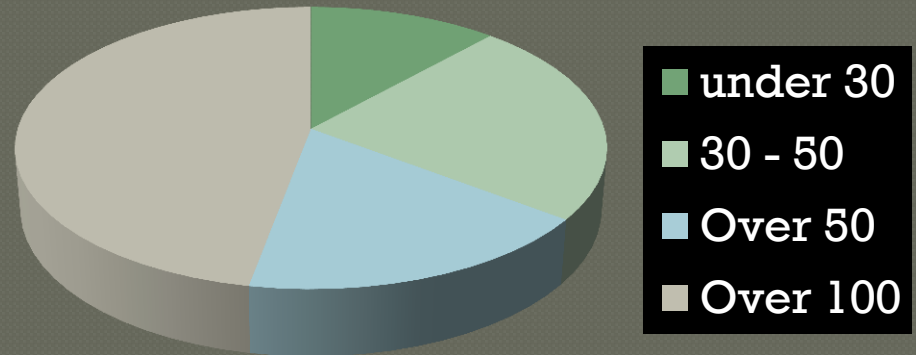
NOTES: The timings are there for guidance and are approx. For example - they don't allow for changeover time, a session running over or finishing early. Running over is a bigger problem than finishing 5 mins early. Coffee breaks can be run into or started earlier – once people have a drink. Lunch will probably need 45 due to serving delays. For coffee, the Brewery approx. times. The time we have is not long to cover a big topic so material needs to be delivered strictly to plan and allow for people asking questions or requiring clarification. The 4.45 finish can be extended to 5pm if required.

# Group Profile

## Pilot rating



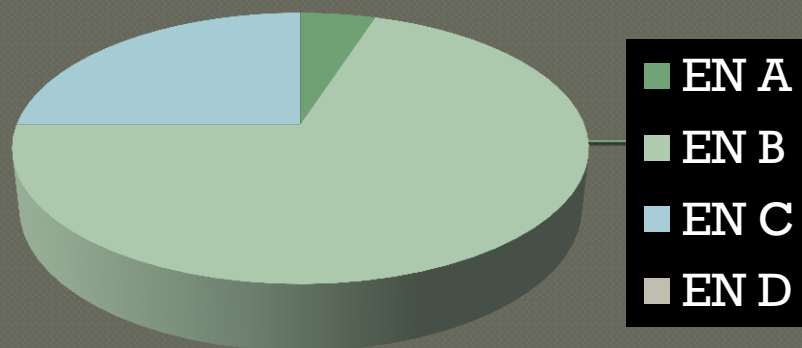
## Flying hours



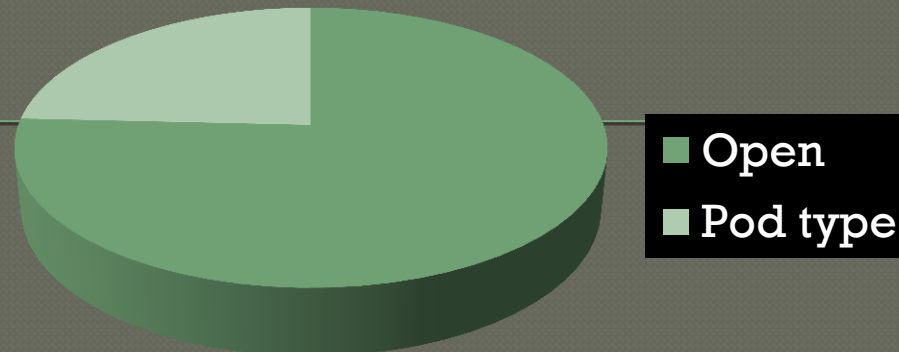
Rating and flying hours tend to be a **crude measure** of experience as:

- Some CP rated pilots have several 100 hours.
- High hours could be spread over many years, so pilot not especially current
- Some with only a few years in sport have accrued many hours – very current
- Some have wider experience of sites, flying abroad, weather conditions.

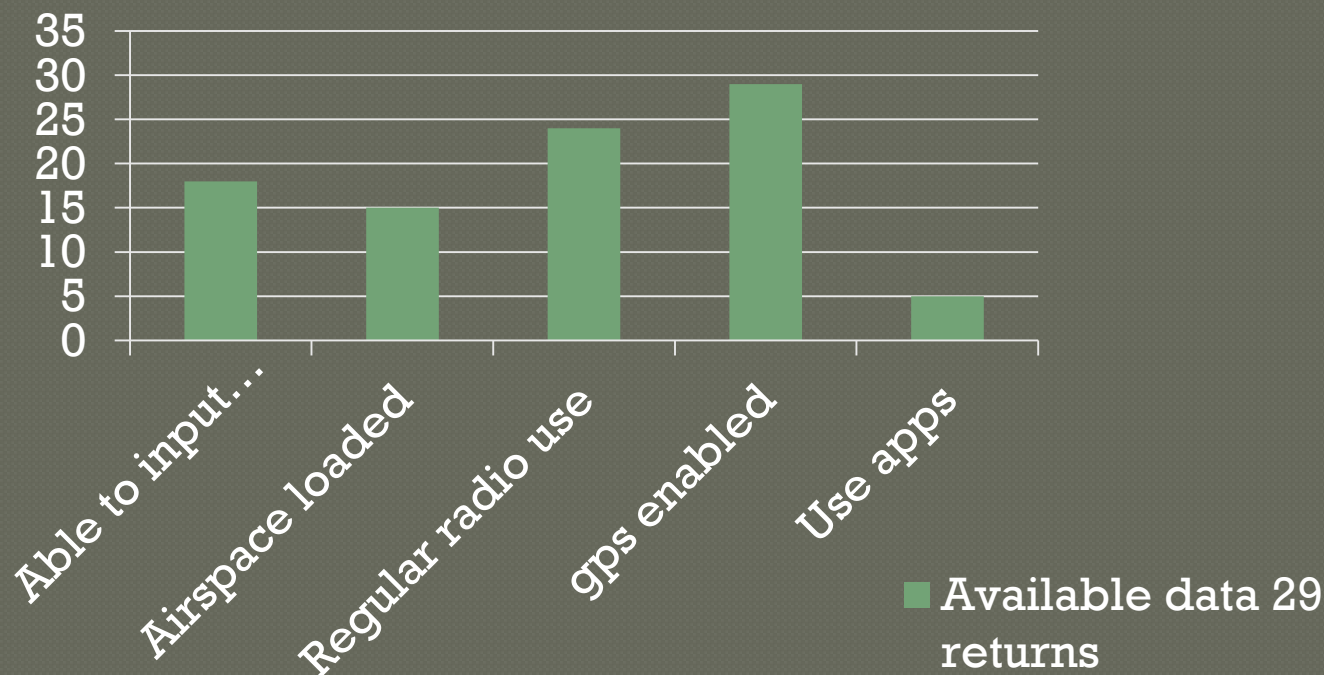
### Glider EN rating



### Harness

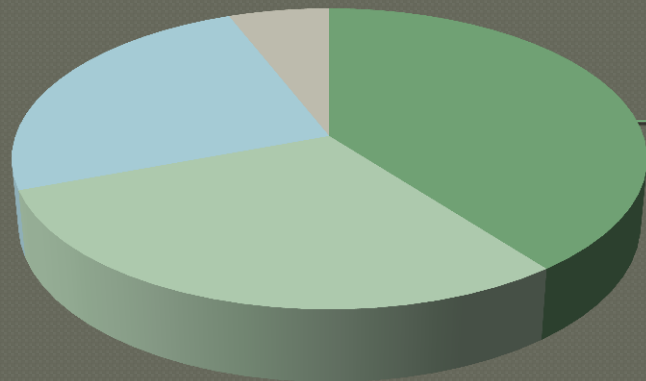


### Instrument use/comms



**IN NO CASE IS A WING, HARNESS OR INSTRUMENTS ANY BARRIER TO FLYING XC - PERIOD**

## Flown xc?

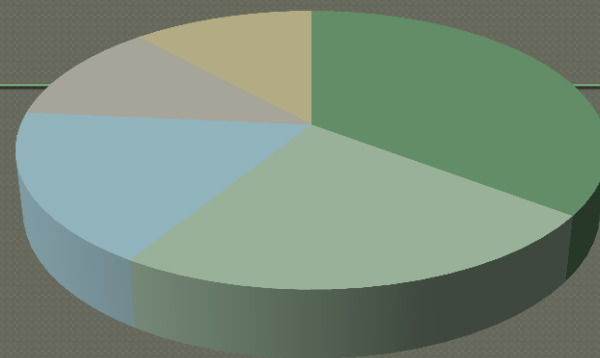


- Never
- A few - dabbled
- Regular - short
- Regular - long

## Strengths

- Patience
- Fairly confident
- Thermalling is OK
- Happy to 'go for it'
- Know the area
- Planning

## Best UK xc



- 10k +
- 20k+
- 30k+
- 40K+
- 50k+

## Weaknesses

- Don't like flying alone
- Finding the best site
- When to leave the hill?
- Assessing weather
- Having no real plan
- Dithering
- Getting into bad places in the hills
- Concern about clouds
- Reading the signs – clouds and ground
- Fly too slow/ too fast
- Finding the second thermal
- Getting back
- Landing in a strange place



# Preparation and Planning for flying Cross Country

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This section deals with:

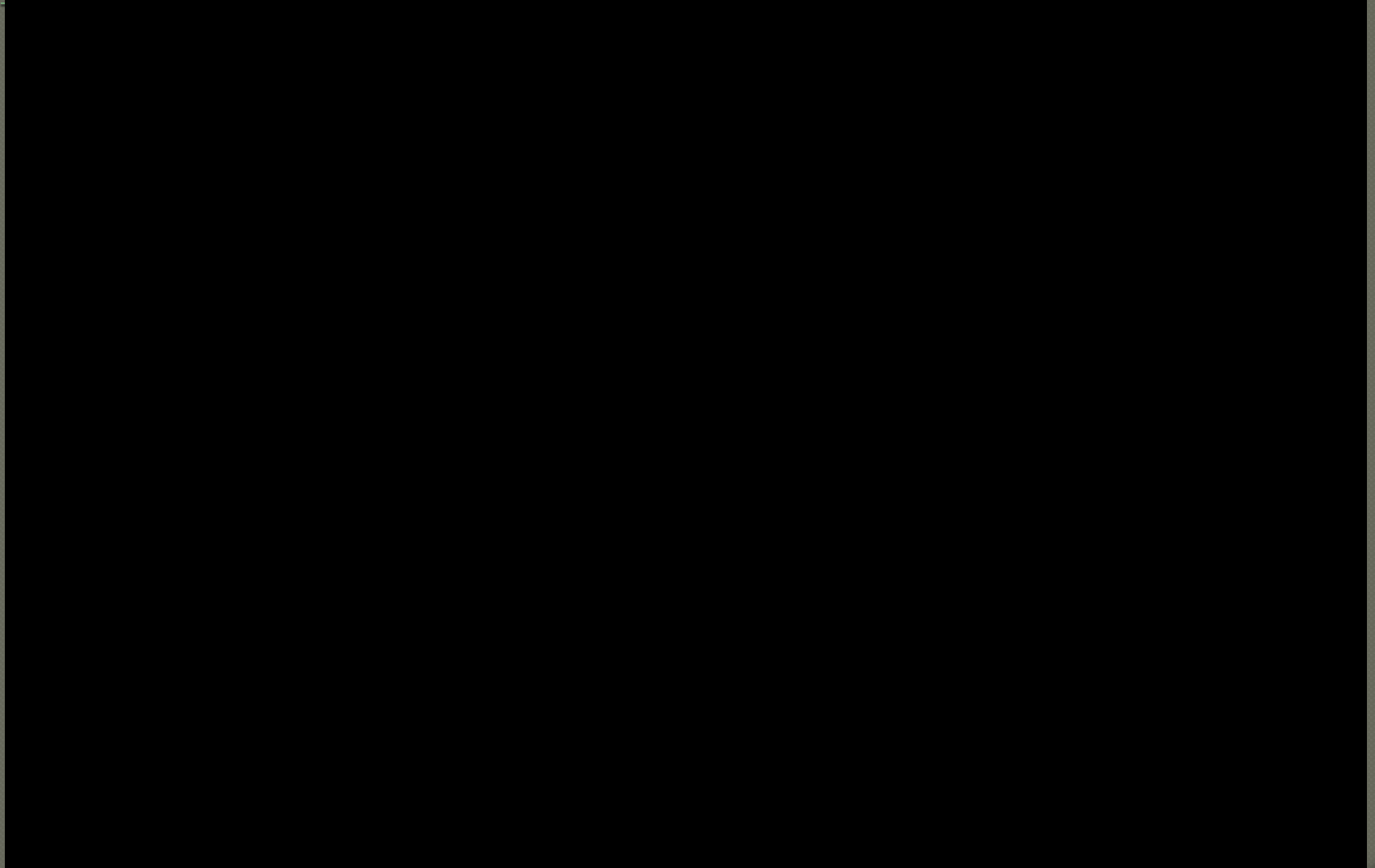
- The motivations for wanting to fly cross country
- The barriers that prevent us from doing so
- Knowing when we are ready
- Preparation for getting the best out of:
  - a) the day/conditions
  - b) our equipment
  - c) ourselves
- Having a plan

In fact, an overview of everything up to the point of take off.

*‘ ....no one has ever seen a thermal ... we’ve only experienced them’*

# So this is what it's all about?

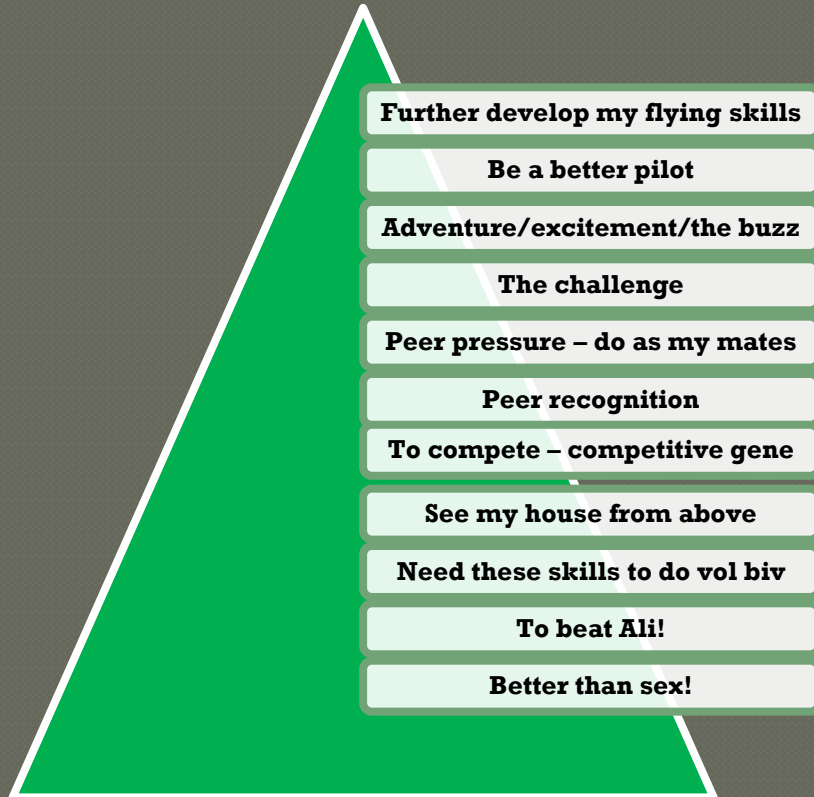
‘Watch with Mother’ - goes cross country flying





# Why fly cross country?

## What motivates one to fly xc



## Barriers to xc



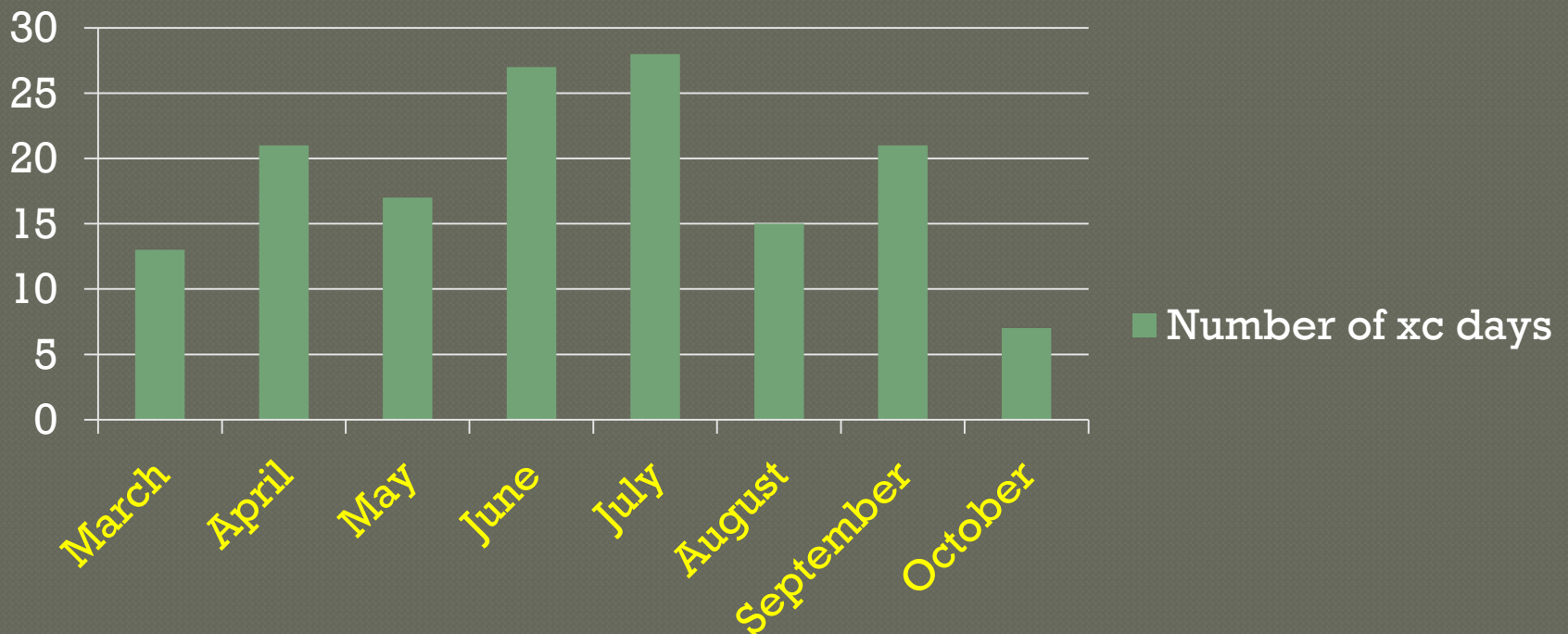
From the lists above, choose two which you feel best sums up your motivations and three which you consider may be barriers.

**WARNING!! Cross country flying is highly addictive**

# UK xc background info' from xcl

- The UK offers many opportunities to fly xc
- Most days – March to November offer xc potential
- It's about gauging the potential of the day and exploiting it as best you can

**Data from logged UKXCL flights - 2014**



# Getting the best out of a day

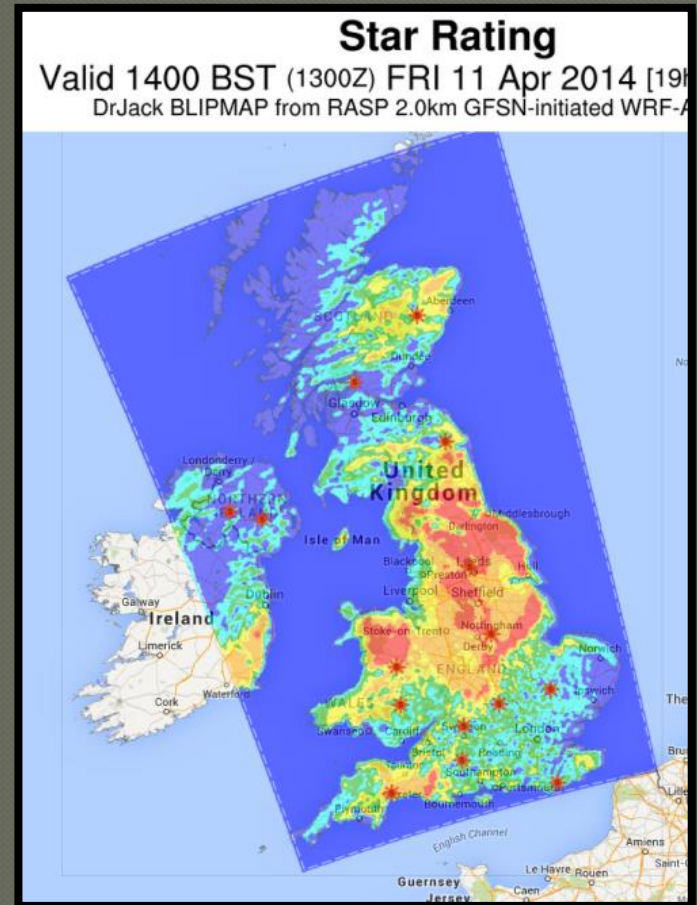
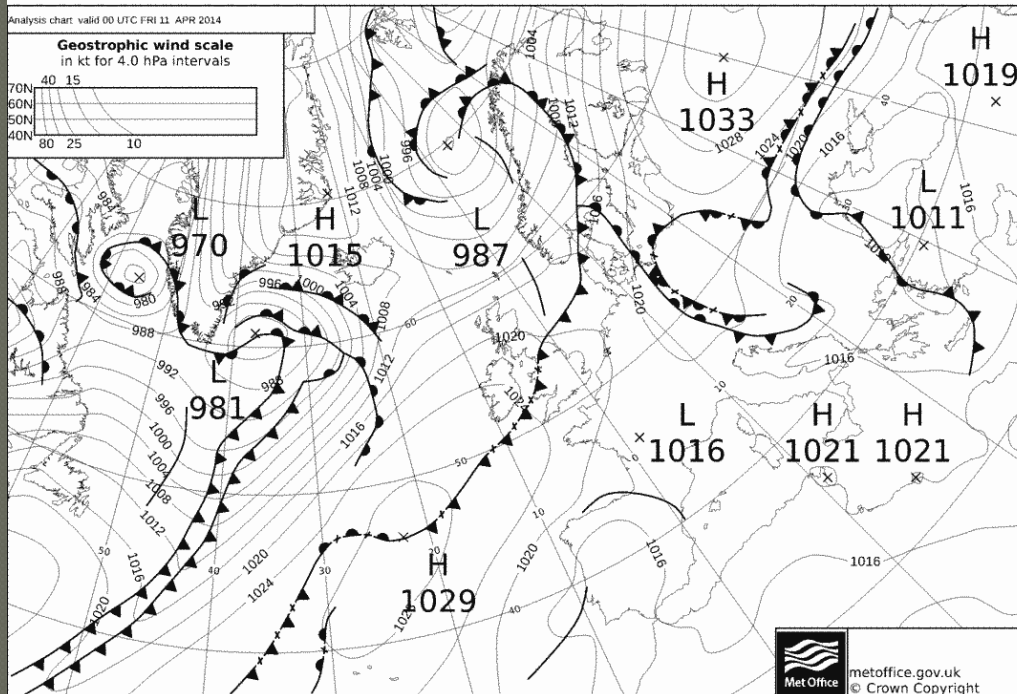
- It's all about being in the right place, at the right time with the right mindset ..... **and a plan.**
- The place (site) and time (not too late!) depend on having read and understood the weather conditions both in advance, on take off and during flight
- Pre flight planning and preparation are vital to improving your chances, because xc flying is a percentages game.

## **WEATHER**

- Understanding the weather/getting the site choice right gives you a good start.
  1. Get several forecasts – not just RASP. Apply it to your local area.
  2. Talk with others, social media/forums ..... get in the loop.
  3. Watch how weather systems develop and move across the UK – spot the windows.
  4. You need to know about – airmass, wind speed, cloudbase, solar heating, lapse rate, overdevelopment potential, cloud types and factor in wave, convergence (types) and terrain.
  5. ALSO .... not just on your take off hill .... but along your projected xc route over a period of many hours. It's more about where you're going than where you've been.
  6. On a paraglider you can't force the conditions, they tend to dictate your course, speed and height – it's more about getting into sync with them.
  7. To confuse you! Good looking days can start surprisingly poor; poor ones become very good.

Using 11<sup>th</sup> April 2014 as an example

- 97 - UK xc flights recorded that day
- 15 - 100k+ flights from Dodd/Wether Fell
- As front progressed SE Bradwell also came into play



<http://www.wetterzentrale.de/topkarten/tkfaxbraar.htm>



# Looking in more detail into the day using rasp charts

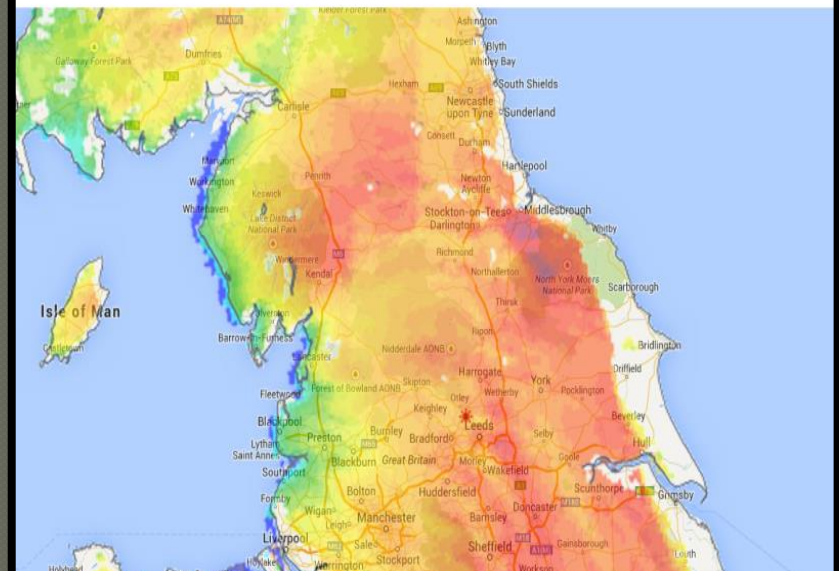
## BL Max. Up/Down Motion

Valid 1600 BST (1500Z) FRI 11 Apr 2014 [21hrFcst@03  
DrJack BLIPMAP from RASP 2.0km GFSN-initiated WRF-ARW model



## Cu Cloudbase where Cu Potential > 0

Valid 1600 BST (1500Z) FRI 11 Apr 2014 [21hrFcst@0336z]  
DrJack BLIPMAP from RASP 2.0km GFSN-initiated WRF-ARW model



Flight Map

XC Player

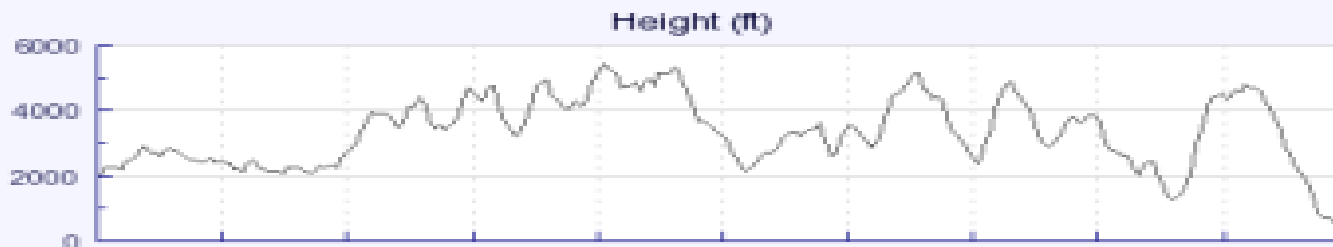
Charts

Statistics

Storyboard

Options

Help & Info



# Prepare your equipment and accessories

The aim is to be mentally and physically comfortable in the air

*“ .....small niggles have a habit of growing into major distractions”*

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- **The wing**

- a) has been well packed away to avoid untangling knots, twisted risers ... etc
- b) well maintained and checked

- **The harness**

- a) fits correctly – set up and comfortable, speed bar easy to access and use, reserve securely fitted and serviceable. Instruments/radio set up for easy use. If an open harness ensure warm clothing for altitude.

- **Instruments**

- a) check batteries have a good level of charge – carry a spare
- b) that you have the necessary ‘fields’ in your vario/gps for an xc
- c) airspace is loaded to map screen - if applicable; not just to where you intend to fly, but beyond
- d) radio frequency is set – you can change in flight – know other frequencies being used
- e) cellphone fully charged, switch off anything unnecessary that drains it. Carry spare battery capacity – especially if using a flight app or using live tracking.

- **Other**

- a) maps – airmap (law); area maps useful
- b) food/drink
- c) money, cards, bus pass, railcard etc
- d) large hitching sign – at least A3 (laminated)
- e) lightweight waterproofs have proved useful



# Prepare yourself around a plan

*“ ..... cross country flying can be a highly emotional and pressured experience that may easily overwhelm the senses and hinder rational decision making .....”*

Good cross country pilots have the following qualities:

## They are:

- calm under pressure
- have control of their emotions
- able to make sound decisions
- mentally alert
- positive thinkers
- supremely confident

## A few tips to improve your chances:

- Study the downwind terrain – by map, google earth or a car drive.
- Develop a simple plan – put a route into your gps or even declare.
- Imagine your flight in your head and certain scenarios
- Study other pilots' tracklogs and look for their climb points
- Don't be impatient. Don't rush to take off.
- Acclimatise to the day whilst still on the ridge
- Being with others helps a lot in a number of ways
- Be well fed and watered
- A healthy body means a healthy mind – mostly.



# How do you know if you're in the 'ideal mental state' to fly safely and well?

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- You're relaxed, although your adrenaline level is high
- You feel a little nervousness, but with a sense of calmness and confidence
- Your decisions will be made spontaneously without conscious thought process as you will have a strong belief in your ability.
- You feel as if you are in the right place at the right time
- You can maintain concentration and have an awareness of what is happening around you.
- You can maintain control over your emotions and not become tense.

BEFORE you take off deal with as many of the things you can control because cross country flying is a percentages game.

Fly to a rough plan as it gives you something to evaluate against afterwards

That said ..... there is a lot of gut spontaneity involved too

# Brief notes on planning a route

*‘ ..... the right mental attitude is more important than the plan’*

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- If you plan (or at least think about) a route it provides a focus
- Mentally it is a sign of commitment
- It de-mystifies the experience
- It provides you with knowledge of the terrain, possible hazard areas.  
possible thermal points, any airspace, landing options, retrieve routes.
- Fly the conditions – it decides, when you go, where, speed, route etc

**You can't force the conditions to your route - so be flexible.**

Additional thoughts (level 1 –first xc's), level 2 – intermediate, level 3 – big ones!):

- L1 – don't be too ambitious, it's more about time in air than distance – don't rush off.
  - - fly known terrain with good landing options along route
  - - try to go with a group/gaggle – a radio is useful (90% listening)
  - - every flight, even the shortest one thermal wonder, is a learning experience
- L2 - build on previous experience
  - - set challenging, but attainable goals – consider declaring them
  - - stick with the gaggle if possible
  - - develop decision making skills – reading clouds, terrain, birds, gliders, smoke etc
  - - be prepared to take risks/try things – build plan B and C into your planning
  - - collect data to analyse later – tracklog, photos/video
- L3 - still a work in progress for me.
  - - think big! It's surprising what you can pull off
  - - start earlier (more risky), fly faster – once at base – go.



# End of session

Lakes

Pennines

To infinity and beyond?

6,000 feet    WoW !!

