# HALE HALL MODEL CLUB NEWSLETTER





Club website link - https://hhmac.bmfa.org/

Hale Hall YouTube channel - HH YouTube

Welcome to the September newsletter. This month we have a report on the LMA show at Elvington and some crosswind theory. Finally a few dates for your diary.

# **Training Day – Sunday 2<sup>nd</sup> October**

A note from our training co-ordinator John Murdy on the planned training day. Sunday 2<sup>nd</sup> October:

'Looking at the long term forecast for the rescheduled Training Day on Sunday, the forecast is not great with potentially strong winds. Currently it looks unlikely that the event will go ahead, however, I am prepared to go down to HH early Sunday morning to do a weather check and provide a go/ no go decision by 10 o'clock. I think with the changeable nature of the current weather this is the best I can offer.'

## **Taking Off and Landing in Crosswinds**

Crosswinds can strike fear into those of us with limited piloting ability.

Dave Ringland sent me the following article that explains some of the theory and provides some useful hints and tips. Over to Dave:

We're all probably aware of the tendency of our model aircraft not to go in a straight line during the take off run unless we positively control them. Assuming all the wheels are pointing parallel to the fuselage there are two main causes of this:

Torque reaction to the direction of the propeller's rotation

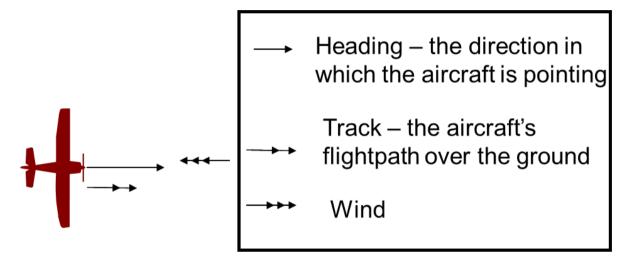
Gyroscopic precession when a tail dragger raises its tail

By far the predominant cause is the torque reaction, which is why most aircraft should have a couple of degrees of right sidethrust applied to the engine installation. Corrective action is, obviously, to

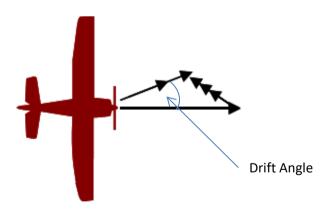
apply rudder to correct any deviation from the runway centreline. If this is also connected to a steerable nosewheel then directional control is available from the start of the take off run – if not, then some speed must be built up before the rudder takes effect.

In a crosswind things are further complicated. In addition to rudder it's also advisable to input a little 'into wind' aileron to counteract the effect of the wind 'getting under the wing'. What you must not do is take off, or hand launch, directly into wind if you are going to encroach any part of the 'No Fly' area, especially if the pits are in that direction as well.

To discuss landing in crosswind we need to define two terms, heading and track.

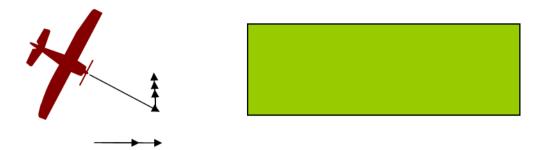


When the aircraft is flying directly into or downwind its heading and track are the same.

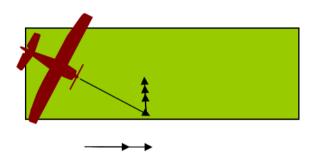


When the aircraft is not flying directly into the wind or downwind its heading and track are different.

The difference between them is called the 'drift angle'.



In crosswind conditions, therefore, when on 'finals' and flying a track parallel to the runway expect the aircraft to be pointing (heading) quite a way away from the centreline. For example, with a 10 mph crosswind and an aircraft speed of 20 mph the drift angle is 30°; at a speed of 30 mph it's 20°.



What is likely to happen, then, at the moment of touchdown? In the illustrated condition, probably either:

The undercarriage will be ripped off, or

The undercarriage will survive but the aircraft will career off towards the side of the runway.

There are two things you can do to avoid this happening. Either you can learn the art of applying the rudder, in the correct direction, just before touchdown so that the drift angle is reduced to zero at the point of touchdown, or you can do what I do, which is to go slope soaring instead.

## **LMA Elvington**

Another year had rushed by and it was time for the last of our regular show events of the year. The Large Model Association (LMA) show at Elvington near York. It is held at Elvington airfield, also home to the full size Yorkshire Air Museum.

The morning of Saturday 13<sup>th</sup> August was fine and sunny with a forecast of blue skies and high temperatures. A select group were attending this year, just Neil Skinner and I. After an uneventful journey along the M62 we arrived at Elvington just after 10:00am. We parked up and strolled the short distance to the flight line to peruse the aircraft on display. The attendance was impressive with a large number of models of all types from large to huge! Most of the models were regular attendees; the Vulcan of Dave Johnson (probably for the last time) and the Constellation of Keith Mitchel. Our anticipation for a good flying display was high. There were several pilots there that we met at the Buckminster Warbird event earlier in the year; unfortunately we had to stay out of the pits this time. Next up was a stroll along the trade stands, as with other shows this year it didn't

take long. Trade presence is always limited at Elvington, many of the traders at other shows being from southern climes and unwilling to travel.

We collected our chairs and bagged a good place on the flight line so we could settle down to watch the display. We were entertained by some excellent flying, some of the formation flying was particular skilful. The sight of four large bombers in close proximity was impressive. Keith Mitchell had several false starts with his massive 'Connie' due to engine problems. Eventually the four Zenoahs were running smoothly and we were treated to his usual graceful display.

Around lunchtime there was a display by the BBMF Lancaster, unfortunately I had the wrong lens on my camera and failed to get a decent photo. Luckily Neil came to the rescue and bagged a few good shots.

The rest of the day passed quickly in the warm sunshine, with coffee, doughnuts and some lunch to keep us going. Overall a good day out, I need to start planning our itinerary for next year! Here are some photos of the day. More available on the club website via this link:

## CTRL + CLICK HERE for more Elvington photos



Part of the flight line



Engine problems for Keith Mitchel's Constellation.





Impressive formation flying!



More formation flying!



















Full size BBMF Lancaster

### What's on

#### **Hale Hall Events**

The club have the following events planned this year, exact dates may be weather dependent!

Following some discussions we have decided to combine the Warbirds event with our fun day this year.

Training day 2<sup>nd</sup> October

Mince pie meet – Late December

### BMFA - In the air tonight

The BMFA continue to host webinars that cover a wide range of modelling activities: <a href="https://itat.bmfa.uk/">https://itat.bmfa.uk/</a>

#### Full size and model shows

Full Size - Duxford - Flying Finale Saturday 8th October

Full Size - Duxford - Flying day - BMFA model aircraft centenary Sunday 9th October

## **Parting shot**

So that is the end of another newsletter, I hope you found it interesting. For future newsletters I would like to include as many of your projects and especially first flights as possible. So please document the occasion with a few photos or contact me and I will try to come down with my camera. I do have some ideas for future articles, but the success of the newsletter will only continue if you, the members, provide me with some copy. Anything aircraft related will be more than welcome, days out, trips, build logs, full size or something for the Curiosity Corner.

Don't be shy; if you don't fancy writing a full article, just send me a few notes and I will do the rest.

If you have any suggestions on subjects to be included in the Newsletter, drop me a line.

In these days of data protection we need to ask members if they have any objection to be included, either by name or photograph, in the Newsletter. If you do not wish to be in the Newsletter please let me know.

Cheers,

Andy Holden.

You can contact me at <a href="mailto:and-under-56@btinternet.com">andy.holden56@btinternet.com</a>