

EFC NEWS



Edition – January/February 2009

Editor's Notes

This month I would like to begin by welcoming two new members to the Club – Christopher Reid and Paul Glen – welcome to you both and I hope you enjoy flying with us. I would also like to extend hearty congratulations to Liam Kelly who passed his Skills test at Perth and now has his JAR PPL. Can I also send our best wishes to Joanne Lyall who passed her CPL at Jerez. To Graham Jones and David Hogg who are now proud holders of CPL/IR and are now looking for a first job. Good luck to them both.

Can I also add a reminder at this point of the forthcoming AGM on the 20th March at 7.30 pm in the Clubhouse. We hope that as many of you as possible will attend and support the past and future committee.

Please also note that it is important to pay your subscription to ensure that you have a current membership card before you fly, and the rate will be £225 as per last year.

Security passes will be required by all flying members from 1st April. The ID pass lasts for five years, and costs £60. To ease the transition, the committee has agreed that the club will pay half the cost of the ID pass application for all existing members who renew their subscription before 1st April. Thus the membership renewal fees will be as follows:

- £225 plus £30 = £255 for renewals before 1st April
- £225 plus £60 = £285 for renewals from 1st April

If you have any questions about the ID pass scheme please contact Malcolm at malcolm@edinburghflyingclub.co.uk.

On the 1st February NATS held a briefing for the new arrangements outside controlled airspace – ATSOCAS. This was held at the Hilton hotel near the airport and had a very big turnout. If you have not received your CD from NATS then you can find out more by accessing the link below.

From 12 March, instead of a Flight Information Service outside the Zone you can request a Basic Service or (if you want radar information) a Traffic Service.

The Airspace Safety Initiative is a major review covering a number of different areas, with the aims of:

- Enhancing safety outside controlled airspace
- Identifying the hazards associated with the use of UK airspace
- Identifying the needs of all airspace users
- Prioritizing the hazards and
- Developing a strategy to mitigate those risks while meeting the needs of all airspace users.

<http://www.airspacesafety.com/content/articles.asp>

Member Profile



Name: Paul Smith

Age: 21

Job: Radar Test Engineer with Selex Galileo (formerly known as Ferranti Defence Systems), testing, faultfinding and repairing airborne Radars.

Flying Training: I had a few flying experiences on Grob G115E Tutors with the Air Cadets when I was a teenager, plus a couple of gliding trips at Kirknewton and Arbroath. Currently nearing the end of PPL training with the Club; I started flying in January 2007, first solo was in February 2008 at Glenrothes. Currently awaiting a spell of good weather in order to complete a couple of solo cross-countries and my QXC which will hopefully with any luck be very soon; hopefully not too far away from the GFT.

Total Hours: Approx. 55, mostly dual

Longest Flight: Haven't had the chance to do any long trips as yet obviously but the longest Navex I have flown to date is the Crieff-Forfar trip.

Favourite Routes: Anywhere will do since I love flying.

Worst SNAFU: Take your pick... usual silly student boo-boos e.g. calling downwind for the wrong runway at Glenrothes, switching off the Auxiliary Fuel Pump after take-off instead of the landing light, trying to take off with feet still on the toe brakes, flying the outbound radial instead of the inbound radial to a VOR, trying to rotate too early on take-off, various tongue-tied RT fluffs and goofs.

Most embarrassing was probably on my first Navex, when I somehow mistook Berwick-Upon-Tweed for Eyemouth; felt a right Pratt there. Bob just sat and said nothing; that was probably for the best.

Worst-ever mistake was probably on a Navex to the West, through the Glasgow Zone. Called Glasgow Approach, my brain obviously jumped out of gear and I completely forgot the RT call I had been rehearsing for so long and then stumbled my way through my transmission as I muttered some incoherent garbage to the poor Glasgow controller asking very roughly in non-standard RT terminology punctuated with lots of Emms and Errs for something along the lines of a Zone Transit. After I ended my garbled transmission Bob turned to me and I have never seen him look so confused before or since. Goodness knows what Bob, the poor bemused controller and other pilots on frequency were thinking. At least we got the Zone Transit though.

Ambitions: To get my PPL finished hopefully before my 22nd birthday in April, followed by some extensive hour building, Night & IMC

ratings and ATPL studying. Have always wanted to be a Commercial Pilot so would love to do my CPL/IR once I have the hours and funding to do so; also fancy becoming an Instructor because it looks good fun.

Would also love to do some trips to the Western Isles, The Highlands, Northern Ireland and Northern England once qualified.

Safety Matters

Students - their 10 most common errors!

For this edition, I thought it might be useful to have a light-hearted look at the typical errors students keep cropping up with during a training flight. A very unscientific poll amongst the Instructors was carried out to find the favourites and there were no real surprises. So what did I come up with? Well, to keep it to one volume, I have excluded errors in RTF procedures (see next issue?), FREDA checks etc, so in the time honoured fashion of the Miss World competition (or TOTP depending on your age) we'll start at number 10!

Number 10. 'Using the brakes against power when taxiing!' This is a common fault with new students at the start of their training when they fear the aircraft will move faster than they can control it (which is usually the case). Using brakes against power is a waste of the energy produced by the engine and will wear out the brakes prematurely. When you ask a student if he would normally pedal his bicycle with the brakes on, the penny seems to drop (sometimes). Another trick to watch out for is the brakes being applied before reducing the power. And believe it or not, they have been used in the air in an attempt to slow the aircraft so that the student can catch up with it! In at **Number 9** is our old friend 'the trimmer'. This is the control that was introduced to you in Ex 4.2 and the one you have probably been fighting with ever since. One of the indications of a poorly trimmed aircraft is the inability of the student to maintain a constant height. In straight and level flight it may be easy in an out-of-trim aircraft when you're doing nothing else, but given an additional task like an RTF call to make or a FREDA check to do, the grip on the column by your left hand slackens, and the next thing you know, your height has changed. Another place where it is seldom carried out is on final approach after final stage flap has been selected. It's

probably forgotten about due to the increased workload as you come in to land, but it will make it difficult to maintain your final approach speed. Finally, don't use the trimmer to change the aircraft attitude – please.

Number 8 is one that applies not only to students, but also to some PPLs and that is 'holding the a/c on the runway too long during the take off run'. This results in 'wheel-barrowing', i.e. the nose wheel is held on the ground after sufficient lift has been generated. The aircraft wants to fly but you won't let it, and by doing so you are not only putting extra stress on the undercarriage but also lengthening the take off run. So don't do it!

'Misuse of the throttle' comes in at **Number 7**. In one case it's not so much misuse but not used. That's noticeable when coming in to land; you try to stretch the last couple of hundred feet by gliding rather than using the throttle. Also, excessive power changes on final approach are fairly common and are usually due to the fact that you are sitting there oblivious to what's going on, whilst the aircraft is descending too quickly or not at all. When you realise this, big power changes are then made to establish the correct descent path. Set the power for the conditions and maintain an awareness of what's happening (or not as the case may be) then it should only require small changes in power to maintain the flight path. And don't increase the power too rapidly on a touch & go, as it could result in a 'rich cut-out', and consequently an engine failure just when you don't want one. (Can't really think of a time when you would want one!)

At **Number 6** we have 'flying by numbers'. This is often seen in the circuit when not taking into account the wind velocity and is guaranteed to upset Jack. You would have been introduced to the circuit in benign weather conditions where power settings and speeds at various parts of the circuit would have been pointed out. An example of 'flying by numbers' is to use these power settings, regardless of the conditions. So allow for the effect of the wind when setting the power. Remember, it's not just about power! Doing nothing about a crosswind on the downwind leg will blow you either towards or away from the runway, and failure to compensate for this will just make life difficult for you when you turn onto base leg.

Number 5 concerns 'under banking in a level turn and over banking in a climbing turn'. This is a bit

of a favourite when flying in the circuit. These turns are usually okay when done in isolation during the turning exercise. However, when it comes to these manoeuvres in the circuit it is not unusual to get a 20-25° turn on the climb out and a 15° level turn onto the downwind leg. Why? This may be due to the fact that a 30° level turn at altitude does not have the same visual impact as one at 1000ft. Or maybe you're just too busy to notice (or can't be bothered).

This week's top climber at **Number 4** is 'chasing the airspeed'. Oh dear, oh dear, oh dear! This is where you watch the ASI instead of the attitude, and when the needle indicates the required airspeed and you think you've nailed it, you look out only to realize the attitude isn't quite right. You readjust the attitude and of course the airspeed changes, so the whole rigmarole starts again. It happens during straight and level flight, a great deal in a climb and in a million other situations. The ASI does take a little bit of time to settle, so hold a constant attitude long enough for the airspeed to settle down to a constant figure.

Coming in at **Number 3** is 'using the column

like a steering wheel'. Whilst this is very useful for demonstrating adverse aileron yaw, it's useless for anything else. You see it quite often during the final approach in an attempt to remain on the extended runway centreline. The column is continually moved right, then left, then right again etc all the way down when in fact a touch on the rudder would do. It can also be seen during straight and level flight when a student is trying to keep the wings level and, if prolonged, has been known to induce airsickness in some Instructors.

At **Number 2** is 'the recognition of imaginary features on a nav ex'. What amazes an Instructor is the confidence displayed by students when they announce "we are overhead blah, blah, blah" (a waypoint which is in fact still 10 minutes up the road) **and** they'll make the features fit! I've seen rivers identified as railway tracks, towns have been moved and locks? Don't get me started on



locks! 'Feature crawling' is another favourite. That's when you fly directly to a major feature but are unaware you are constantly changing the heading, and once there, announce with a big smile "how was that Bob?" Oh! By the way, Bob's not big on diplomacy.

And at **Number 1** is our old friend the 'rudder'! This is not so much as misuse. It's just that it isn't used at all in the air, and a student will be described as having 'lazy feet'. Funnily enough, it's used properly on the ground for taxiing but once airborne the rudder pedals take on the role of footrests. It's almost as if there is a placard on the pedals stating, "not to be used in flight". Amongst numerous other places, the lack of rudder can be seen on the climb out when you can see the nose of the aircraft yawing to the left, and also during the flair when the aircraft yaws to the left and touches down pointing across the runway. Another problem that sometimes occurs is 'leading with the rudder'. This happens during a turn when a boot-full of rudder is used at the start of a turn, then a little bit of opposite aileron is used to stop the roll going too far, thus flying out of balance. So the moral of the story is – use your feet. Of course the Instructors in their time as students were very diligent, industrious and well prepared they also turned up on time for their lesson, so obviously none of the above could possibly have applied to them. Aye right!!

HAPPY LANDINGS

Tom Ward

Lightning strike!



Flying out of RAF Valley, you get used to sudden weather changes. So when a high-level solo

exercise was interrupted by an all-stations broadcast recalling us to base I was not unduly worried. With utter confidence in my aeroplane and my instrument rating what could possibly go amiss?

I entered cloud at FL220 on a TACAN to PAR approach. The stratus darkened dramatically – I could have been night flying. I was soon flying through embedded Cb. Not as bad as it sounds with swept wings and a high wing loading. There was turbulence aplenty but the Gnat cut through it. The air smoothed out as I continued the gentle descent. As I scanned the instruments I noticed a strange green glow on the edge of the coaming. It was everywhere in the cockpit. I traced my initials in green sparks on the windscreen. St Elmo's fire. I tightened my ejection seat straps and slid my left hand onto the seat pan handle.



I was well aware of two things. Fuel tanks which are near empty are much more explosive than full ones. Also, St Elmo's fire was known amongst sailors in real ships with tall masts as a precursor of lightning strikes. But almost before these thoughts had coalesced there was a mighty flash and bang. A long microsecond ticked past. I was still flying, there were no warnings, and the instruments were all functioning.



pre-positioned chair and a coffee was thrust into my hand. The best coffee ever...



I relaxed my grip on the seat handle and settled back into the approach with a laconic call to ATC that the engineers might want to have a look at the aircraft as it had had a lightning strike.

The approach and landing were normal and on walking in I annotated the F700 that the airframe had had the strike. Then off I shuffled to the crew room. The phone went. It was for me. "Gordon, it's Bill. Come down to the hangar, there's something I want to show you." If Bill, the engineering Flight Sergeant issued an invitation, you went. No questions.



In I walked; there was my Gnat, access panels removed. Quick work. There was Bill. "Take a look." A hole had been blasted in the starboard wing. Big black electrical track marks led along inside the wing, all along the fuel tanks (near empty and rather explosive, remember?), and ended at a hole blasted in the rear fuselage. I was, unusually, at a loss for words. I think I just might have gone slightly pale. But before my jaw could even open, firm hands sat me on a carefully

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