

# EFC NEWS

EDINBURGH  
FLYING CLUB

Edition 2 – September 2007

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## *Editor's Notes*

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This month I would like to begin by thanking those of you who have given a financial contribution to the Club. This, combined with two good flying months in July and August, have made a significant impact on the finances of EFC. The EGM on the 19<sup>th</sup> September will consider the issues of membership fee and engine fund and we hope you will attend and let us know your views.

Congratulations go to Graeme Jones who successfully completed his solo cross-country to Prestwick and Dundee. He is now in a position to complete his PPL soon. Graeme is aiming to get a commercial licence and starts training at Bournemouth next month. He joins Paul Davies and Neil Watson as Club members taking that step - Neil is currently in Arizona doing his flying training and hour building, having successfully completed his exams at Oxford. Joanne Lyall will make four when she starts her training in Jerez next year. This is indeed a testament to the calibre of pilots and training at EFC.

Congratulations also go to Alistair Kennedy on his new job as business jet pilot with Scottish and Newcastle. This means Alistair will be able to continue to instruct with the Club, welcome news indeed.

Last month we had the second Club night out at the Hog's Head and as the photos show a good time was had by all. Guinness and chips was a big feature. The next night out is to be held in The Queen's Arms Frederick Street. Hope to see you there.

This month – EFC News has another slight change, to two columns rather than three and the header on page one only. This was suggested by one of you and it helps me to know what you think! Also this change allows for larger photographic images. In this issue we have part six of Alex's flying adventures in the USA, a member profile from Gordon Johnston, and a Safety Matters article from Tom Ward.



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## *Member Profile*

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Gordon at home on the farm.

**Name:** Gordon Johnston

**Age:** 55

**Job:** These days a smallholder raising rare breed sheep

**Pilot training:** Started 5 April 1973 in RAF Chipmunk WK507 and being copiously sick. This continued for many flights thereafter.

**Total Hours:** 500 and a bit

**Aircraft Flown:** Chipmunk, Jet Provosts 3 & 5, Piston Provost, Gnat, Hunters 6 & 7 Cessnas 150, 152 & 172. Rallye 150 ST, 220, Cherokees 140, 180, 161, 181. There are some others which don't feature in the logbook.

**Furthest Flight** Hmm. Probably Biggin Hill to Dundee delivering Rallye G-BEVA to its new owners.

**Favourite Route:** So many to choose from. Edinburgh to Isle of Man on a summer's evening takes some beating, though heading anywhere in the Western Isles can be fabulous.

**Worst SNAFU:** I did have one published in Pilot's ILAFFT. This involved running into haze and losing ground contact in the bottom of a narrow glen in the Rallye with 3 passengers. More amusing was a brake failure on a Chipmunk and ending up in a rose bed in front of the Station Commander and visiting dignitaries.

**Memorable moments:** Can I have more than one? Though I say it myself, a rather fine beat-up of Linton-on Ouse in a Gnat on a Friday evening (23 June 1975, XP540). I managed to scatter the mechanics who were servicing the lined up Jet Provosts quite effectively. On arrival back at Valley, there were acres of empty concrete and a Wing Commander waiting to welcome me with the words "My office, Monday morning 9 o'clock". It turns out that the people on the first floor balcony I had flown under at Linton were the Station Commander and Chief Flying Instructor... Then spotting the lighthouse on Lismore Island from overhead the Isle of Man at FL 350 before descending for a low-level navex. Perfect visibility, glorious thrash (I mean navex) round the Highlands, managing to put up a tunnel of spray along Loch Ness and landing at Macrihanish with nothing whatsoever on the fuel gauge. The comment from the refueller – "I've just put in more fuel than these things hold". Finally, being shown the scorch marks on the fuel tanks of a Gnat having suffered a lightning strike recovering to base in a thunderstorm.



Son Iain the QHI (centre, holding lamb) drops in to steal my motorcycle magazines.

**Ambitions:** Just to keep flying, especially having been seriously ill. I have a son who is an Army QHI and it would be good to fly with him and see if I can remember how to hover.

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## Safety Matters

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### GASCO's 'Fit to Fly' DVD

A growth industry in aviation in recent years has been the introduction of human factors, and in doing so it has done away to some extent the term 'pilot error' when attributing the cause of an accident. It's a well-known fact that an accident is usually the result of a chain of events that has been allowed to take place and the pilot is merely the last link in the chain. Break the chain and you have no accident! A reviewing of accidents from as long ago as 40 years reveals the presence of human factors. It just was not recognised at the time.



For example, in 1965 at Heathrow, a Vanguard had 3 attempts at landing in bad weather. On the 3<sup>rd</sup> attempt during the go-around it crashed onto the runway killing all on board. According to reports, both the co pilot who was flying the aircraft and the captain were new to their roles. On the go-around the captain selected flaps up beyond the 20° position laid down, but the design of the flap selector made it easy to select the wrong setting. Other crews had reported difficulties with the go-around procedure. Added to this the RVR was reading 50mts too high giving a reading which allowed another approach. In this one example a large number of human factors are present amongst which are, decision making, frustration, peer pressure (another Vanguard had landed in between attempts), stress, poor rostering, badly designed equipment.

Whilst human factors were primarily aimed at the professional side of aviation, inevitably it filtered down to the PPL level and has now been a subject in the Ground Studies syllabus for some years. However, we all know that once the ground exams have been passed some subjects are completely forgotten. So in what way do human factors apply to PPL flying? Does knowing that

static anthropometry is the measurement of joint-to-joint distances help in the decision to go flying? Probably not!

To help in this decision-making, GASCO have released a 'Fit to Fly' DVD on human factor awareness for GA pilots. First released in 2000, the DVD has been updated and gives a brief history in its introduction to human factors. Drawn up in the form of a Checklist are the human factors involved in preparing a flight and includes Pilot wellbeing, Aircraft serviceability and Docs etc, Environment & Operation i.e. NOTAMS, weather, flight planning and diversion.



It shows 3 video clips the first concerning a ground incident where the pilot with other things on his mind, (he had a 'domestic' with the Mrs), is a bit stressed, becomes distracted during the pre flight swings the prop and the aircraft starts taxiing with no one at the controls. You can guess the rest! The second is about a cross-country flight that involves a whole list of human factors to such an extent that the aircraft should never have been taken out of the hanger and the third about a 'macho' glider pilot who got out of his depth. Each one is followed by another short clip and by using the checklist it shows the human factors involved. Ok there are no Oscar winning performances from the actors but it is the message that is important. If you want to have a look at the DVD there are a number available at the Club or alternatively, the DVD is available from GASCO Office, Rochester Airport, Chatham, Kent ME5 9SD and is great value for all of £1.

Tom Ward



*Balloons or incoming missiles?*

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### ***Into the Wide Blue Yonder Part 6***

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The Harvard was an advanced trainer of which 16000 were built in the USA, many being used in Canada as part of the Empire Training Scheme. Painted bright yellow, they were particularly distinctive. It was powered by a 650 HP Pratt & Whitney engine, with retractable gear, constant speed propeller and tail-wheel. Instructor and student sat in tandem under a sliding canopy. The instructor in the rear had virtually no forward visibility because of the steel tube roll-over frame which prevented the cockpit being crushed if the plane flipped over on the ground. Total fuel capacity was 92 gallons in two 46-gallon wing-tanks, with 16 gallons in reserve. VNE was 225k. A minor irritation was the position of the fuel gauges which were located by the seat on the side panel and which could give rise to what is known as "parallax error" (a new expression to most of us). Fortunately, a warning light on the front panel would illuminate when either tank contained less than 10 gallons (30 minutes flying time). The Harvard's high nose altitude restricted forward visibility to nil when taxiing and it was quite common to see a line of Harvard's taxiing out with rudders wagging like a row of ducks.

Starting the engine was something of a lottery, and involved pushing a pedal with the right heel to engage the starter, followed by the right toe to engage the clutch. A week or so after I felt I had mastered it, I found myself one morning on the flight line, desperately pumping away – to no avail. Our assignment was 45 minutes formation flying (all solo) and with the two other Harvards waiting at the holding point and with Jack in the Tower losing patience, I was about to give up, when the engine fired. Our exchanges on the R.T. had of course been overheard and I was the butt of a few jokes later.

In the early days, first essential – and quite time consuming – was to memorise the position of the

50 odd switches, dials levers etc in the cockpit, so that we could locate each one without hesitation in the dark. This was one of the requirements before the first **night** solo.

My own first **day** solo was uneventful apart from an unexpected distraction on the approach. Heavy traffic around the airfield and a busy tower forced me to make a very late down-wind call, followed by a very long approach. Juggling with the throttle to maintain a steady rate of descent, my approach became something of a roller coaster, but the landing itself felt reasonably comfortable, and my instructor Mr Latta appeared happy enough as he greeted me by the briefing room door. Five other cadets soloed that day – just about the average – and we all celebrated on the following Saturday at a diner in Miami.

First solo spin was also a memorable event, as the Harvard had a sharp stall with little warning, flicking over into a violent spin, usually with no help from aileron or rudder. Cadets were sent off on solo spins after about a dozen with the instructor and I record below the emotions of one particular cadet as he set off on his long climb to 6000 ft. He wrote it for the August 1943 edition of the school magazine. I admire his honesty.

NOTHING TO IT REALLY “waal” said my instructor one day (he always made “waal” sound like a very intellectual and weighty preamble to a deep remark on the origins of the universe) “Waal” he said “I guess its time you went up for some solo spins, Metcalf”.

So this was it! Nothing to it really – we’d done plenty of them dual. Opposite rudder and stick forward and out you come, as simple as that. Of course, some people forget the procedure for recovery or there’s some mechanical failure and you just went on spinning. Anyway here we are at 6000 ft already – won’t be long now. But wait! Falling at 52ft per second we would hit the ground in 2 minutes. Better climb to 8000 ft.

So we’re all set now for a spin to the right. Mustn’t hurry things – take your time quietly and efficiently. Check the instruments, looking very colourful, all in their little green areas. Aesthetically pleasing, just like a picture by one of these Dutch chaps. Safety belt OK, though it looks a bit frayed and old – and we don’t have a shoulder strap as in the Tiger Moth! Must be careful not to bang my head, coming out of the spin. Now – was it stick before rudder? Must be careful not to bang my head, coming out of the

spin. Now – was it stick before rudder? Must clear the area below me, so do a steep turn. All seems well, except I have lost about 600ft, so must climb again to 8000ft.

Good God! Look at the time. Only 2 minutes left of my allotted time. Cut the engine, raise the nose, and hold her steady. What a racket the whole thing shaking and shuddering – never as severe as this with the instructor. And isn’t the engine coughing and spluttering? Better not to take any chances in this semi-stalled position. Open up and clear the area again.

Ten minutes to go – if I am late getting back, the instructor’s going to start worrying. He might think I’ve – well spun in, I suppose – mm – yes.

Ok lets go home. I’ll have a bit of a twinge entering “14 spinning” in my log book but it isn’t as if I couldn’t do them – nothing to it really” (J Metcalf).

Some trainees seemed to thrive on escapades. One cadet who was cleared to do some upper air exercises (solo), set off in the direction of a girlfriend’s farm, put his Harvard down on a field, gave her a 30 minute flight and nonchalantly returned to base.

An interesting experiment was included in our training programme, which involved each student taking his Harvard to its maximum height so that he could see for himself the effects of altitude on the human body and on the internal combustion engine. In my case I reached 13200 feet before the engine decided that enough was enough. I felt no ill effects. The descent, slow and gentle, in figures of eight through a mass of small cumulus, was a delight.

This is the end of Part 6. In Part 7 we complete 100 hours in the Harvard.

Alex Findlay.

In the next issue we have the final part by Alex, an account of flying a variety of aircraft by Gordon and details of a trip to the Peterhead area taking in two unusual airfields.

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## ***EFC NEWS***

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