Take Flight AVIATION

Member Briefing

Spring 2008

Welcome

We welcome **Kim Towle** on board as our Sunday office manager. Kim is keen to learn to fly and will make life on a Sunday run much smoother. I think that she has already begun to understand that the weather holds all the cards in this game.

Has spring sprung?

Looks like it may have but then today is Sunday 20th April and we are all grounded owing to two less than helpful occluded fronts to the north and south. Nothing flying today, so a chance to get some more thoughts down on paper for you.

Club Issues

I think we could call this one caring for your kit. We know that aeroplanes are generally reliable provided that we care for them. If we treat them like a Formula 1 racing car they will become as reliable as a Formula 1 racing car. We do not need to "warm the brakes and tyres" so do not taxi against the brakes. If you find that you are taxiing much above 1000 RPM check your big size 9's are clear of the brakes. Such action will obviously wear the brakes out and use up un-necessary fuel putting more wear and tear on the engine.

Similarly when we start do not "Give it a good blast to clear it out". A cold engine needs time to come up to operating temperature. Revving the guts out of it from cold puts additional pressure on the bearings and cylinder liners. The oil needs time to circulate and thin down as it warms. If left an engine will slowly increase in RPM as the oil thins and the drag on the crank shaft reduces. Think about engine handling as we will all suffer if an aeroplane goes tech owing to general use and abuse.

Moans and Groans over.

Congratulations to **Ronan Dardis** on his first solo on Sunday 27th April

Recent Successes

PPLs Awarded

Oliver Shuttleworth (still can't drive a car legally!)

Paul Meakin
(can drive a car legally but leaves it parked in the fast lane)

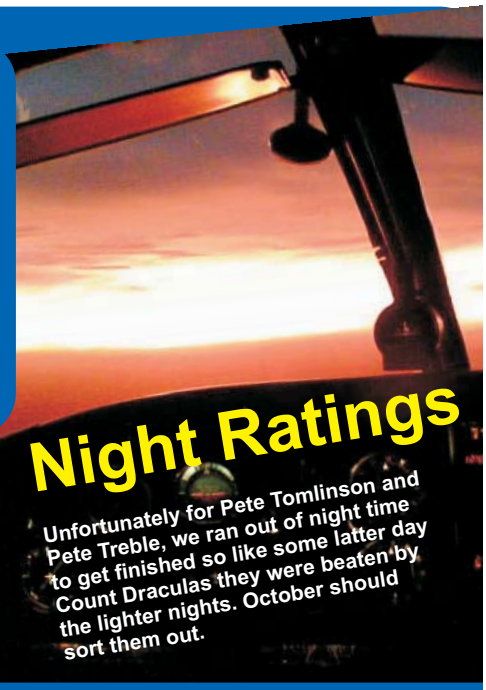
Congratulations to both of you. Hope the Jag's OK Paul. This continues the first time pass record of their instructors who will remain nameless. Well done Jerry.

First Wednesday Club Meets

These continue to attract interest and the next is set for 7th May. We have recently looked at using VORs for VFR planning and also the handling of Constant Speed propellers.

The 7th will be a joint effort with Bob Shuttleworth showing how Flightstar works on the club computer and myself covering Met and Aircraft care so there should be no excuses then to plan those long summer flyout trips.

The introduction to the PA32 Cherokee Six was well received. It will be at the club on 11th May for the first batch of pilot checkouts. Please let Mike Roberts know if you are interested.



Night Ratings

Unfortunately for Pete Tomlinson and Pete Treble, we ran out of night time to get finished so like some latter day Count Draculas they were beaten by the lighter nights. October should sort them out.

Flying Matters

I generally think it is a good idea to discuss an aeronautical topic in a flying club newsletter. I revalidated my Flight Examiner authorisation recently and some useful things came out of that. As part of the Biennial flight I demonstrate the PFL and get pilots to carry one out.

For those of you who found the foregoing comments about engine handling a revelation stay with me this section refreshes the engine failure drills when away from the circuit. I think that we use euphemisms a bit too much in todays PC world. One such area is the Precautionary Field Landing. This phrase suggests there is some sort of choice in the matter and that we ought to land before something more serious occurs. When faced with the PFL for real there is little choice the aeroplane is going down your job is to bring down in a controlled fashion.

Possibly after perfecting take offs and landings this is the next most important skill that you need. The failure may be catastrophic with oil and smoke in abundance or it may be more sinister in its origin from perhaps carb icing or component/magneto failure. From some one who has experienced sever carb icing to the extent that instrument panel vibrates so much it becomes ureadable please pay heed.

The first thing to get over in the event of an engine failure is the shock, It hasn't/ wont happen to me is likely to be your natural reaction. That may take some seconds to overcome. The catastrophic version will assault your senses but if the pistons have vented overboard and the propeller is stuck upright in front of your face I'd take that as a fair indication things have gone wrong. The carb ice/ component failure may be more insidious and manifest as a reducing RPM and vibration, which gets worse on application of carb heat. (You need to know that so you don't chicken out and take carb heat back off again).

In either case you are now somewhat committed to finding a suitable place to land the aeroplane. From this point on you owe the aeroplane nothing its let you down. Also do not be too concerned about finding a field that it can be easily flown back out of. Put it this way I wont be volunteering to fly it back out again its probably coming back out on a low loader.

In the event of a failure convert speed to height and TRIM for best glide of 75 knots. Turn DOWNWIND. Basically put the wind direction on the bottom of your DI. Now look for a suitable field. Note that they are all now in to wind following your earlier turn. Ideally the field should be grass sloping gentle upwards with a pleasant aspect and ideally a cosy country pub at the far end where you can go and make a larconic phone call back to Wellesbourne. The reality may be Hobsons Choice. When the adrenaline is pumping your first field selection is likely to be the best one. Look between wing tip tail and spinner. The aeroplane will not glide very far from 2500 feet so do not get seduced by a field that you will never get to. Similarly do not get drawn to standing crop which may hide a lethal tree stump. Cattle and sheep will not hear you in the glide and neither will people so avoid if at all possible. Check all around the aeroplane rather than just stake your future on the 25% of options visible from the P1 seat.

Check why the engine failed if its not blindingly obvious. Start by your left shin where the fuel selector is positioned and work across the bottom of the instrument panel. Is the fuel on a tank with contents? If its painted red its important so check mags- mixture- carb heat and attempt a restart. If the engine does restart head back carefully but be prepared for a re-occurance of the fault. If the engine doesn't start make your May Day call to alert the outside world and close down the engine so it doesn't either catch fire or else burst back in to life in the final stages of your approach only to fail again. Leave the battery on so you can make the May Day call and squawk 7700.

Brief your passengers with as much confidence as you can muster, who will be alarmed at the sequence of events. Get your passenger to release the door latches and slide their seat back retightening their belt. By now you will be gliding to a point about 1000 feet above your field in a base leg position. Now the vital bit; you must assess the drift if its light you might want to S turn away or orbit to loose height if the wind is strong cut the corner straight to your aiming point. The aim point should be a good 1/3rd into the field. Its better to slide through the far hedgerow at 30knots, than arrive at the first one at motorway speed. Once your nose covers your aim point deploy full flaps and drive the aeroplane down at 75 knots and land do not let the speed bleed off through anxiety. It will be rough accept it. The objective is to walk away safe. If you do practise this you will at least be ready for when it happens in real life and that might be the thing that brings your odds back to an acceptable level.

Clearly if the aeroplane is on fire you must beat the flames down to the ground before they weaken the aeroplanes structure. Sorry to be the bringer of such good news but I hope these little missives will help you.

Airfield Noise

A recent meeting of the airfield users was held. The noise abatement off Runway 36 was raised. We all know the drill about the clearing turn on to a track of 030 to avoid Charlecote. However, do make sure that you have plenty of height before you reef your aeroplane in to the turn. I have often seen pilots roll virtually knife edge after take off at less than 100 feet. Add in a gusty wind and you have the makings of a stall spin accident. Furthermore the Helicopter operations now use the triangle to the East of 36 extensively. A potential conflict could occur. Please therefore remain wings level until you pass the road and have gained perhaps 200 feet then roll gently on to a track of 030. For newer members to the Airfield that's to run over the green copper roof at the horticultural research centre. I'd rather you stay safe than for someone's afternoon to be spoiled momentarily by engine noise. However we do have noise sensitive areas at Loxley and Hampton Lucy and it makes sense to fly outside of these and use them to make the turns at either end of the down wind leg.

Happy Trails

John Eburne

CFI Take Flight Aviation
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