

EFC NEWS



February/March 2011

Editor's Notes

In this issue I would like to begin reminding you of the Annual General Meeting of the Club, which takes place on Friday the 25th March at 7 for 7.30 pm and urging as many of you as possible to attend. In addition to the normal AGM business, this meeting will give you a chance to find out and ask questions about the new structure of the Club, flying rates, budget for 2011/2012, new rates for instructors and details of the proposed 're-launch' of the Club.

Member Profile



*Patricia & Angus Macdonald at Mull-Glenforsa
(Joint portrait by Robin Gillanders)*

Name: Patricia & Angus Macdonald: Part Two: Angus
(See last issue of EFC Newsletter, November/December 2010, for Part One: Patricia)

Job: Professor of Architectural Studies, University of Edinburgh; Partner (with Patricia Macdonald – see last issue) in the Aerographica Partnership (www.aerographica.org.uk).

Flying Training: PPL at Edinburgh Flying Club on Cessna 150s (1980); Instructor Rating (1984), CPL (1987) and IR (1991) all at Oxford Air Training School, Oxford Airport, Kidlington. The 1980s was a great time to train at OATS. The standard of instruction was extremely high and there were a number of very experienced instructors, nearing retirement, who had flown in World War II and thereafter made successful careers as test pilots. I remember being taught spinning in the Tomahawk by Gordon Webb, who had carried out the spinning trials on the Jet Provost in his test-pilot days. We took considerable liberties with the aircraft and he showed me that no matter what you did with it, the Tomahawk responded instantly to the proper application of anti-spin control. He also demonstrated that it takes at least two and a half turns for the spin to develop in the Tomahawk and that if, before then, you simply push the control column centrally forward it will recover. I wonder how many people over the years have actually spun a Tomahawk. This kind of training by the very best of teachers was a great confidence booster for me and stood me in good stead when I subsequently became an instructor.

Total Hours: Just over 3,600.



Dry landscape on our trip to North Africa – see Longest Flight, below (Patricia & Angus Macdonald)

Longest Flight: Edinburgh via France and Spain to Marrakesh in the summer of 1992, after acquiring our Cessna 172, G-BSNG. This trip

took us over three weeks and involved flying across some very varied and dramatic terrain. Our experiences on this journey would make an article in themselves. Before departing Rabat, for example, we were briefed, by an officer in the Moroccan Air Force, on the required routing for the flight between Rabat and Marrakesh. This involved many turning points, each consisting of little more than a few palm trees and a nondescript building or two, which were difficult to spot from the air even in a featureless semi-desert landscape. On asking why we could not fly direct he explained that the specified route would keep us clear of royal palaces – "We had an American in a Cessna here three months ago and he flew over one of the palaces." "What happened to him?" I asked. "He is still in jail!" was the reply. Contemplating the possibility that they might have thrown away the key, I asked if I could take a photocopy of his map with the route on it. "That won't be possible" he replied – "the photocopier is in Casablanca." I had to write the routing out in longhand, to his dictation, on the back of our flight-plan form and sign it. "This is to prove that I briefed you correctly if anything goes wrong," he explained. Fortunately, nothing did go wrong and we made some fascinating flights over desert landscapes of amazing forms (many of these due to severe erosion) and colours (the yellows, oranges and reds of African soils), following the 'nursery slopes' of the southern mail routes pioneered by pilots like Antoine de St Exupéry.

Favourite Routes:

In Scotland: As in Pat's article in the previous issue: Edinburgh to Oban, Mull–Glenforsa, of course, and points west – Stornoway, Benbecula and Sollas beach, North Uist. We have also landed on the famous beach – the Traigh Mhòr – of Barra on several occasions. Highlands and Islands Airports now operate this but when we first went there in the early 1980s it was run by Loganair. On contacting them to get PPR we were told that you could not land at Barra unless you had landed there before, which is an interesting concept. When we went nevertheless, we found that the staff at the airport, all Loganair employees at that time, were unfailingly helpful.

Further afield: Edinburgh to the South of France. We used to make this trip annually, basing ourselves at Valence in the Rhône Valley north of Avignon. Rheims–Pruney was always a convenient staging point – a great little airfield with a hotel on its perimeter owned by very aviation-friendly people. The only difficulty was that of obtaining accurate weather information for

departures early in the morning, and this caused us a problem on one occasion. Armed with nothing but the television forecast of the night before, which assured us of blue skies, we took off one beautiful morning at 07.00h and, after turning south, quickly found ourselves in fairly unfavourable conditions – driving rain which took the cloud-base virtually down to the ground. We were into thin cloud so quickly, and at such low level, that it was impossible to turn back and we had no alternative but to climb to our safety altitude and continue south. This took us into more solid cloud and when I dialled up Paris Volmet I found that all of the Paris airports and most of the others in Northern France were completely wiped out for us – typically 1000m visibility, heavy rain, sky obscured. A warm front had apparently moved in, faster than the forecasters expected. The Paris Volmet did have reports for Lyon and Geneva (on or near our route), which were CAVOK so the forecast was not entirely wrong and we carried on. There was not much alternative. After an hour we began to get brief glimpses of the ground. An hour later still, we burst out into glorious wall-to-wall blue sky and sunshine, which lasted all the way to Valence. I never get airborne on a longish navigational flight without a full navigational flight plan, which can be converted to IFR, if necessary, and that policy certainly paid off that day.

On another occasion returning from Valence we stopped off at Rheims and learned that a total eclipse of the sun was going to occur the next day (11 August 1999). We decided to stay to witness it. The story of how Pat managed to get us accommodation within half a mile of the airfield (all available beds for miles around having been solidly booked out for years before) is too long to relate here. In the event it was a great day. Hundreds of aircraft arrived from all over Europe. For a couple of hours around the time of the eclipse all flying in northern France was prohibited so the airfield switched to party mode and the champagne of the region flowed, which was great business for the hotel. We discovered that the time which elapses during a total eclipse, from the moment the moon's disc first begins to bite into that of the sun, through the period of totality, until the disc finally clears away, is exactly the same as the time required for two people to comfortably consume an entire bottle of champagne, which is surely proof that there is order in the Universe! Champagne aside (if such a thing is possible), the experience of the total eclipse itself was, of course, overwhelming.



Above the Mer de Glace in the French Alps (Patricia & Angus Macdonald)

Another favourite destination has been Annemasse, just south of Geneva. We operated from this friendly small airfield several times in connection with a collaboration between ourselves and John Berger (the Booker-Prize-winning writer) in which Pat made a photographic essay to accompany a new edition of his deeply moving story *Once in Europa*. This project involved – following some useful mountain-flying instruction – aerial photography in the Alps around Mont Blanc, in the Chamonix valley and over the Mer de Glace. Mont Blanc rises to almost 16,000 ft and there are several nearby mountains, which are not much lower. So, with a ceiling of around 10,000 ft in our trusty NG, we found ourselves *in* the landscape rather than *above* it, an experience which was thrilling and sobering in equal measure. By choosing our weather carefully, we managed not to terrify ourselves too much and the scenery was some of the most awe-inspiring that we have viewed from the air. Annemasse itself is a delightful airfield to fly from. It is quite busy, with a very active flying club, a parachute club and numerous air ambulance flights, due to its

proximity to one of the main ski-ing and mountaineering areas of France, and many business aircraft as one would expect in an airfield that is close to Geneva. There is no air traffic control – the pilots simply organise themselves by making standard calls in the circuit. In none of our visits did we witness a single incident that resulted from the absence of an air traffic controller – which is something that controllers in some of our smaller airfields in the Highlands and Islands of Scotland – who handle all of three movements a day and can nevertheless be quite officious at times – might do well to consider.

During our stays at Annemasse we also operated over the Jura Mountains. To reach these from Annemasse involved transiting the airspace of Geneva International – a very busy airport. We were routinely given VFR clearances to fly through the Geneva overhead at 4,000 ft. This was, of course, entirely safe, as the numerous scheduled big-jet movements were well below us and even if one of them had had to go around, there would have been ample separation. Imagine the fuss that would result from a request for a VFR clearance through the overhead of Heathrow, Gatwick or Manchester International – the Geneva controllers were, however, able to handle such requests with ease and charm.

Worst SNAFU: Inevitably in 30 years of flying there have been quite a few of these.

The closest I ever came to actually writing off an aircraft occurred on an instructional flight at Edinburgh. It was a circuit detail with a very good student who was ready for his first solo. He flew three perfect circuits in ideal conditions (about 10 knots of wind directly down the old Edinburgh runway 26) so I told him to make the fourth landing a full stop with the intention of sending him solo. By the time we were on finals the wind had dropped and the aircraft was slightly high on the approach. I said nothing. As we neared the runway the student lowered the nose a touch to gain the threshold as a result of which the speed became a few knots too high. At the round out the aircraft ballooned up to about 50 ft. I still said nothing. When the stall-warner sounded I took control and applied full power. This caused the aircraft to roll to the left. When I was unable to correct this with aileron I realised that we were stalled and stopped the roll with a bootful of rudder – but not before we had acquired about 60° of bank. Gradually the speed increased, enabling me to level the wings but then the right wing dropped. This time I was ready for the wing-drop and stopped the roll at around 40° of bank. I

decided at this point that we were going nowhere and that it would be preferable to crash within the airfield boundary rather than in the car park beyond so I pushed the control column centrally forward – not an easy thing to do at zero feet – and instantly regained control (the theory works). I was able to level the wings again before we hit the ground and managed to pull off an acceptable landing on the upwind numbers. The tower controller told me later that he had seen the plan view of the aircraft from below and above in the course of a couple of seconds and when the aircraft was examined subsequently, scrape marks were found on one of the wingtips where it had contacted the runway during one of our mad gyrations. If we had been a few millimetres lower we would undoubtedly have become a statistic. Later, over a coffee in the Club, I asked the student why he had not initiated a go-around immediately after the balloon. "Oh," he said, "I knew that I had screwed up the landing and was waiting for you to take control". So, for a few vital moments no one had actually been flying the aircraft! The incident was entirely my fault and I had to ask myself, on how many occasions during this student's training had I taken control at a bad moment without clearly stating the essential words "I have control". As the saying goes – I learned about flying from that!

The only mitigating circumstance was that it was discovered later that, due to a fault in the carburettor, the engine had not been developing full power. If it had, flying speed, and therefore control, might have been regained immediately after opening the throttle.

Another incident of which I am less than proud occurred following a photographic sortie over the Cairngorms on a perfect day in early summer. After completing the detail we flew north with the intention of refuelling at Inverness only to discover that a layer of cloud was moving in from the Moray Firth.

We requested an IFR join at Inverness and were given the usual rather complicated instructions involving stepping down gradually at intervals based on DME distances from the airfield. This was necessary as, lacking radar, the Inverness tower could only provide IFR separation by allocating levels.

I thought that flying level in the cloud (we were in the clear at 6,000 ft) would probably cause the



Corrie lochan, Cairngorms (Patricia & Angus Macdonald)

aircraft to collect ice so I was hoping to negotiate – rather than stepping down gradually as instructed, which would have taken us into cloud – to continue in the clear at 6,000 ft to the Inverness beacon and then let down quickly through the cloud using the VOR procedure. However, before I had time to do this, a British Airways 737 called up announcing his imminent arrival. (BA ran a schedule from Gatwick to Inverness in those days). He was given exactly the same clearance as we had been but was instructed not to descend below 8,000 ft, which was due to our presence below him. As we neared Inverness I came under increasing pressure to declare a lower level than 6,000 so that the BA could continue his descent and eventually, against my better judgement, I accepted a descent to 4,000, which meant flying level in cloud. We instantly began to pick up clear ice (the worst kind).

The added weight and the modification of the wing profile made the aircraft increasingly difficult to fly but worse than this was the effect of ice on the propeller which, through imbalance, caused the engine to run roughly.



Braided river, Cairngorms (Patricia & Angus Macdonald)

Pieces of ice also flew off at regular intervals and banged into the wings and fuselage, which added to the drama of the occasion. After what seemed like an age, we were sufficiently clear of the hills and close to Inverness to safely descend to 3,000 ft, at which point we came into clear air with the airfield directly ahead. We were more or less lined up on the short runway 30 and, following a transfer to VFR, were given an immediate landing clearance. As we braked to a halt on the apron, blocks of solid ice slid off the leading edges of the wings and smashed onto the tarmac. I vowed then that I would never again be suckered into such a situation. Next time, BA would have to wait – it was another case of learning about flying from that.

Ambitions: To continue flying for as long as funds and flying medicals permit.

Angus Macdonald

Flying Off Skis in the French Alps

Turning final at 6000 feet is strange enough in a single-engine light aircraft, but when you are lining up for a runway only 350 metres in length, it takes a bit of getting used to – I didn't - get use to it that is!

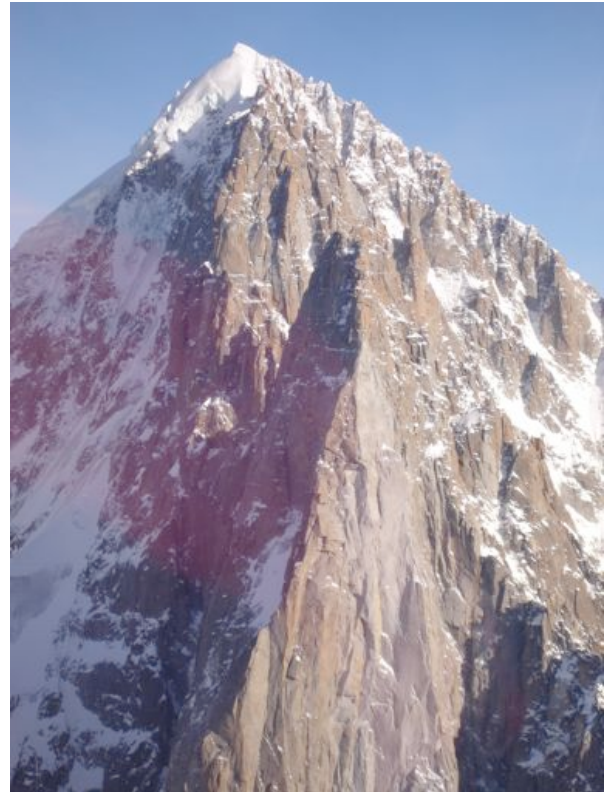
During a recent skiing holiday in the French Alps and having previously had air experience flights off snow covered mountain Altiports, I decided that the fabulous weather and high pressure called me to take some proper instruction on how to fly on and off the snow. The Méribel Altiport sits at 5400 feet in the French Alps some 60kms South West of Mont Blanc, a peak which rises to 12000 feet. This very short runway (350m x 15m) has the added attraction of an 11% slope; take off has to be downhill on 33 and landing uphill on 15.



Having booked myself in for an hour and a half's flight to Mont Blanc, my brave instructor Sebastian gave me an excellent pre-flight briefing focused more on the technique of flying in the mountains than flying the plane (a Jodel) with which fortunately I had some familiarity. The key factor in the briefing was the speeds - most particularly for approach and landing. 100km/hour for take-off was to be followed by an initial climb at 120, cruising at 130km/hr, but best rate of climb 150km/hr – that all seemed reasonable. Where I began to get nervous was the numbers for approach and landing. I was told that the line-up for a long final at 6000 feet with 600 feet to go needed a power setting of 2000rpm and that I must maintain 130km/hr indicated right through to the flare. What I did not fully appreciate was that at this altitude indicated airspeed under-reads ground speed and I reckoned on a true approach speed of 120m/hr – interesting!



The Jodel I was to fly is a D140R made in 1968. This magnificent wooden, tail-wheel aircraft is about the size of a PA28 but with a very chunky wing structure, and in flight much heavier controls than we are used to. Fortunately I had flown Jodels off grass in the 1970's when I was a member of the Tiger Club in Redhill, and my logbook records some 8-9 hours of handling which surprisingly the memory recalled fairly quickly. Hence with inappropriate confidence we started up with my very tolerant wife ensconced with the camera on the rear bench. The Lycoming engine purred into activity and initial checks were complete, but then the first challenge of having skis rather than wheels with brakes. For the run-up to check the mags and the carburettor heat there is nothing to stop you moving forward! Speed seemed to be the essence – I looked at the instruments and I asked Sebastian to see where we were going. The other unusual feature of being on skis is that you can only turn left, not right whilst on the ground. Hence after completing a 360° turn on the apron we lined up on 33 and took off into the abyss. The stall warning flashed as I went through 60km/hr but we lifted off and immediately as the ground fell away into the valley, found ourselves some 3000 feet above terra firma. The Jodel climbs beautifully at 150km/hr indicated and indeed we maintained that all the way to Mont Blanc in fabulous turbulence-free conditions. I was surprised that Sebastian insisted on valley flying where you adopt a position very close to one side of the valley to allow maximum turning capacity if needed. Levelling off at 11500 feet we had a magnificent view both of the mountains and the glaciers and Sebastian reported that just last week he had completed his Mountain Flying Instructors course, which required landings on such glaciers.



The mountains are astonishingly beautiful but navigation a real challenge. All the snow-covered valleys look the same!



The real drama came after an uneventful return to the overhead of Méribel Altiport. The shape of the mountains requires a long 5 mile down-wind, with a short base-leg and a turn onto long final with the landing strip looking more like a snow covered tennis court in the far distance. Initially I did not find the speed of 130km indicated too worrying, despite the fact that we maintained this through the 3rd degree of flap on reaching the final 1 mile descent. Where it all went wrong was that as I flared at the threshold some 100m from touchdown I reduced power – this was simply instinctive for preparing for a tail-wheel three-point landing. Sebastian ramming his hand over mine flattened the throttle to the cockpit wall, at

the same time bringing the stick so far back that I nearly joined the Sopranos! The landing was what you might say “somewhat firm”. Speed on the ground fell off very rapidly as we ascended the hill and came to rest on the apron. I had spent nearly one and half-hours flying effectively on instruments, since the horizon was always a series of jagged mountain peaks- mostly above where we were flying. Do you recall that sense of relief when learning to fly when you think that a tiring flight is finished? Not to be the case – Sebastian looked at me and said, “I think we should try that again”. Not to let the side down I immediately repositioned and took-off to find of course that I was instantly doing down-wind checks for another of these very long final approaches.

Overcoming everything I have learned about approach and landing in the past 45 years I religiously kept power on, flared and to everyone’s surprise made a more respectable landing. The following day I was back for more punishment, even though my wife on this occasion chose to go skiing! For my second lesson we flew south to a small Altiport at Huez 30km South East of Grenoble. The advantage of Huez over Méribel was that at least this short snow strip was on the level. You cannot do touch and goes on these altiports, but four full stop landings were achieved with at least modest success. On the way home Sebastian allowed me the ultimate mountain experience of doing a touch and go at approximately 100m/hr on a glacier – I greatly admired his courage in allowing me to try this!



The Jodel is a great little aeroplane and I fully recommend it to anyone who has access to what is sold in the UK as the Musketeer, but for a real challenge I can promise you there is little to beat the experience of taking-off and landing on snow.

Perhaps if we have another bad winter we should think of fitting skis to the Archer!

John Smyth

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Editor: Ian Forbes
Tel: 0131 339 4990
E-mail: forbesmacmillan@btinternet.com

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