



December 2005 Newsletter

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Startup - Dave Thomas

Ladies, Gentlemen, Fellow Aviators,

Over the past two months there have been some excellent events which are beginning to breathe new life back into the Flying Club. We have had the two excellent talks arranged by James which have been packed out; and we have had the 727 simulator session organised by Clare which was a great success. The idea of generating more interest by having more 'zero feet' events is clearly working and I do believe that more people are talking to each other about flying, about events, and generally exchanging ideas and experiences. This is great.

I'm also pleased to see that we are managing to migrate things further towards the North. We have had the fly-in to Elvington and the 'zero feet' trip to Duxford: I am receiving more e-mails and notes from folk based in London and it was great to see that Mark Edsforth made it down to Bournemouth to have a go on the simulator. Mark had hoped to bring a Cessna 401 down from Blackpool, but the weather was just too bad, so he came by train. That's enthusiasm.

It's good to see more people becoming actively involved in the Club.

One of our speakers talked about the Red Arrows, and it was a really interesting evening but, in the middle there was a little snippet which will be my serious thought for the Christmas newsletter. During one of their displays the published TRA was busted by three microlights which could easily have caused a serious incident and as it was the display was cancelled. The pilots were tracked down and two of them were fined £3000 and a third was both fined £4500 and lost his licence for three years. All this could have been avoided if they had read the NOTAMs or rung the freephone number (0800 354802) which tells you when/where the Red Arrows are displaying. I am not a fan of the latest NOTAM system which has been inflicted upon us; it is not user friendly, it contains a lot of extraneous information, and is very inflexible, but it is all that we have. I persevere because it is every pilot's responsibility to check the NOTAMs before flying. If you don't, then as with the pilots above, you could end up in deep trouble.

Finally, there is a special Christmas quiz in this newsletter which I hope you will find fun and take the time to do. The first two correct entries will receive free membership and a free chart for 2006. Winners will be announced at the Christmas party on the 10th Dec. Please email your entries to clare.grange@onetel.net by 9th December. As a clue, you will need a Half-Mil Southern chart.

Orkney Trip - David Dewar

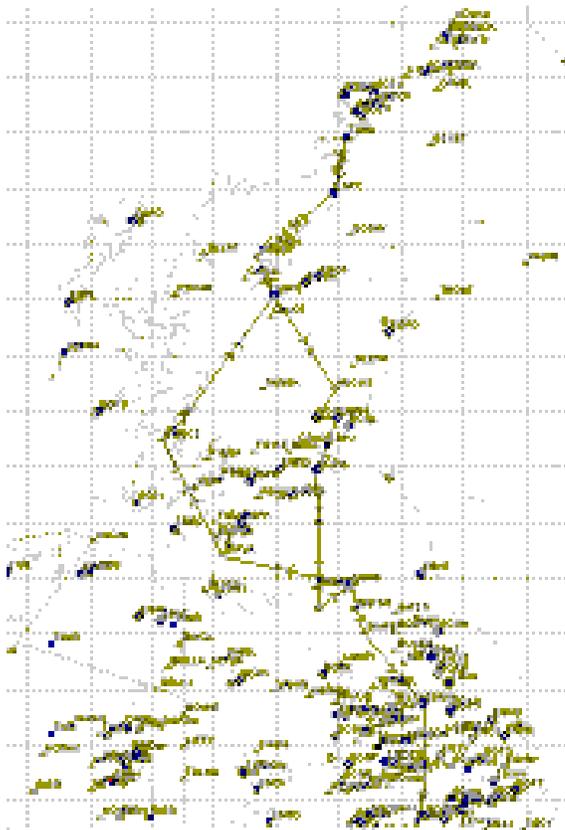
Last year we went with two friends to Stornoway, to visit an uninhabited island in the Sound of Harris. Three days of absolutely perfect weather, which I cannot recall experiencing before.

This year, the project was to fly with one of the same friends and another to Orkney (Kirkwall), to look at some of the archaeology on those islands.

So, after arranging to hire an aircraft from our (present) home base, we made our plans. Almost needless to say, that aircraft went 'tech' with magneto problems. Locating the same aircraft, from a bit further afield, that we had used last year (a TB20) we felt well satisfied, and I went and undertook a revalidation flight on it for insurance purposes. A week before our trip the TB20 was written off in an accident in France (though fortunately no reports of injuries). So, back to the drawing board. Another Arrow was located, but proved to be booked for the critical time. A Bonanza was similarly unavailable, having an engine rebuild. So, we finally settled on a PA24-250 Comanche, but from a base 200 miles away from us and our two friends. Nevertheless, a checkout was arranged - but it turned out to be on the day of the tornado in Birmingham. After a 200 mile drive, we arrived at the airfield in torrential rain, and swam (it felt like) from the car park to the clubhouse. At least we could do any paperwork, and get some gen. on the aircraft. Sitting in the aircraft, oggling at the instrumentation (the like of which I had never before encountered: a Garmin GNS530 GPS NAV/COM, coupled to a Sandel EHSI, a Mode S digital transponder, and an autopilot with altitude hold and selectable climb/descent rates, and all the normal stuff to boot), there was a sudden break in the murk - a 'sucker's hole' - enough to do a couple of circuits for me to be approved as a hirer. Relief - we had found an aircraft for the hire, starting the following Sunday.

So, on Sunday 31st, we again drove (my wife and I) the 200 miles to the airfield, and collected the PA24 to position it to Carlisle ready for our trip. We planned to fly from Tatenhill to Sherburn in Elmet (my former home base) for lunch, thence to Carlisle to leave the aircraft until meeting our passengers the following morning. In the event, we were late leaving Tatenhill - amongst other delays, we had to wait for 30 mins. whilst a local pilot left his aircraft on the pumps, leisurely collected his

family, leisurely seemed to do his flight planning, loaded his passengers, started his engine, and stayed on the pumps to perform his power checks, etc., in an Arrow whilst a queue built up. It transpired that this is normal practice for this particular pilot, despite prominently displayed exhortations at the pumps not to linger after fuelling! So, in the event we flew to Sherburn, had a quick cup of tea, then on to Carlisle. The flight to Sherburn was uneventful, and full of very familiar landmarks being VMC all the way; that to Carlisle was in intermittent IMC over the Pennines (via Harrogate and SHAPP), but similarly uneventful with a descent in the overhead of Carlisle to break cloud at 3000' or so.



The Route

Meeting our friends on Monday, we briefed them, issued life jackets for the sea crossings we would do, flight planned, and set off. Climbing out of Carlisle to FL45, we set course (i.e. selected the GIRVA reporting point on the GNS530 as a 'direct to', and let the autopilot do the rest. Prestwick allowed us to climb to 6000' on their QNH, and we coasted out at GIRVA in clear air above the broken white stuff below. Crossed to the

west coast of Arran, and routed up across Kintyre towards the BRUCE intersection. Descending to 3000' we set course for Oban airport. The cloud was, by now, few or less, so the view was brilliant. (I was, though, still monitoring and cross-checking everything with radio nav aids - whilst still learning about the capabilities of the GNS530.) Descending to 1500' near Oban, we did a tour of the bay, before joining the circuit and landing. The 'final' call elicited the response 'G-UZ surface wind xxx/xx, the kettle's on.'



Taking tea at Oban (preceded by the receipt of radio transmission: "Surface wind xxx/xx, the kettle's on")

As has been reported elsewhere, the welcome from Paul Keegan, of Total Logistics Concepts, who own Oban airport, was magnificent, and we had an hour or so sitting in the sun outside the office, watching the sailing festival in the bay, observing some aircraft landing and taking off, chatting, and having virtually a silver service tea drinking session. Marvellous, and it made us all glad to be there - to employ *litotes*.



Our hired aircraft (the whitish Piper Comanche) parked on the apron at Oban

We took on some fuel, and set off again. I was not yet fully au fait with the fuel consumption rate (in terms of what actually happens with this engine in this aircraft) so opted for fuel caution - especially as we were near MAUW even with partial fuel, and decided we would call at Inverness on the way to Kirkwall.



Southern part of Jura, with the Paps just visible, and reflections of the clouds in the sea

Flying up the *Great Glen* was accomplished in the blue sky sort of CAVOK, with minimal mountain wave effect. The visibility was excellent, and the ground features being crystal clear at whatever height we chose from 1500 to FL75. Ben Nevis was magnificent and easy to spot! Inverness asked us to join right downwind for R23, and avoid St George's, which was active. So, an uneventful landing saw us visit the unmanned flight reporting and briefing room, whilst the fueller saw us right for a few more miles.

Inverness to Kirkwall involved a climb over the Black Isle to the BONBY reporting point. I elected to go IFR and join the W3D advisory route as we climbed to FL70 through a thickish undercast - the weather having decided to close in the further north and east we went. (I was glad I did not have to worry about fuel.) From BONBY we routed to WIK, then to KWL. Over the Pentland Firth we were cleared to descend to 2600' direct to the KWL. I elected to rearrange this to a descent to 1700' over the sea just the east of the southern Orkney Islands, having heard on

the ATIS that the base of the overcast was at about 1800'. Emerging from cloud as scheduled (the ATIS was entirely accurate), and becoming VMC, we cancelled IFR, and arranged a visual approach to R09 at Kirkwall. Joining right downwind for R09, we could see, over to our right, the landmarks of the Point of Grimsetter ('what exactly IS the point of Grimsetter?' asked one of the the rear seat occupants) and Weethick Head - which might be needed on the following morning. Landing accomplished, with a Trislander landing on the other runway, and passing the intersection as we turned for a backtrack on R09, we taxied to the hangar, and parked with the assistance of a local pilot who was helpful beyond measure, even giving us a lift in his car to the terminal, and arranging to be on hand the following day if we needed to get our aircraft.

We had arranged car hire prior to the trip, and everything was waiting for us at the terminal. A quick cup of tea to gather our thoughts preceded setting off south to the island of Burray where we had reserved rooms at a guest house - which turned out by chance to be owned by someone who had done a fair amount of light aircraft flying a few years ago, from Lamb Holm for photography.

Knowing that the weather on the Orkneys has a reputation of being rapidly changeable, I kept an anxious eye on it over the next few hours. However, all piled in to Kirkwall and found an outlet for some rather splendid products of the Orkney Brewery, together with a rather good Indian restaurant. Replete, we headed back to our guesthouse for the night.

Waking on Tuesday at 6am, I started looking for weather information on the BBC news, and formed the opinion that if we were to be back in time (we had to get the aircraft back to its home base by Wednesday evening ready for a further hire on Thursday, and one of our friends also had a deadline owing to running a course on Friday) decided that discretion was the better part of valour, and we would set off on our return journey that day. An excellent, and well-sustaining, breakfast allowed me to inform the others, and the guest house owners - who were not altogether surprised, knowing about flying. (In the event, Weethick Head was not appropriate - the beer was so good: there were no deleterious after effects.)

We contacted our new local friend who had helped us with the hangar the previous day, and arranged to meet him at 1030 to get the aircraft out. After a bit of flight planning, we set off for Inverness. Crossing the Pentland Firth, however, we could see a wall of weather approaching us from the west, extending over the mainland. This was evidently the harbinger of the forecast occluded front. I decided that I would not venture either through or over it, and diverted to Wick. Again, a superb welcome awaited us, and we ensconced ourselves in the lounge, where tea and cake was made available to us, and watched the front arrive, and the Royal flight make arrangements to depart in it! (We had arrived about 20 minutes before Wick was surrounded by Class A airspace from the surface to FL60 for a 10 mile radius as a temporary restriction whilst a Royal Flight (parked about 50' away from us, was readied and departed.) Another aircraft, a TB9, arrived from Cumbernauld only about 6 minutes before the TRA started, also on a weather diversion. Eventually, the occlusion seemed to start to pass, so we set off again for Inverness. However, the flight was in solid IMC most of the way, until we descended below about 3000' over the Black Isle. Our approach to Inverness, therefore, could be visual, and we landed and taxied to a parking spot on the north apron. We borrowed some, very heavy, chocks from the handling agents as the wind seemed to be getting up.

I had tentatively arranged with a friend that we all might meet on the Wednesday. However, the weather situation was a little unpredictable, and I did not like to think of her making a journey and waiting around, and us not turning up. I'd therefore rung and suggested that we should not attempt to meet on this occasion; now, here we were at Inverness, and no friend in sight owing to my over-caution. However, it was Tuesday, and not the arranged Wednesday!

Lacking detailed knowledge of Inverness, we were now at a loss as to what to do for the night, since it was clear we would be going no further that day. On the other side of the apron was the Highland Flying School. Obviously, if we went in there, and mentioned our plight, and that we knew (albeit through the medium of online fora) the Pink Aviator herself, they would offer us some advice - which might not simply be 'Just go away.'. This was indeed the case - after a session of jocularities when I mentioned PA - they arranged to try to find some accommodation for us. This was not met with success, but they did call us a taxi, and arranged with the driver to find us a guest house for the night. After driving around a little, the GH was found - and we had a good night, after an

evening sampling the wares of the Black Isle Brewery, and a meal in a good Thai restaurant.

The following morning, we decided to continue to Carlisle. Climbing into fairly unbroken IMC at FL75, we set off southeast-ish to the ANGUS reporting point, on the airway southwest of Aberdeen, and set off on the route southwest towards Perth, staying under the airway and with a radar service from Leuchars. Climb performance had not been as spectacular as previously, and the engine seemed a little unhappy enroute to ANGUS, so, I eventually decided to divert to Dundee for an engineering check. The consensus was that carburettor icing was probably the cause, and that a prolonged ground run at 2000rpm with the mixture slightly leaned would benefit the situation. (I had been using carb. heat fairly liberally during the flight, but there had, it seemed been a larger build-up than would clear that way.) Tayflight at Dundee gave us a welcome, and their engineer inspected the engine externals to make sure nothing was obviously wrong. After that needed reassurance, and the ground run, we set off again towards Perth.

Scottish Information kindly coordinated a clearance through the TMA and the Edinburgh zone for us, straight through the Edinburgh overhead. Setting course, thence, for the TALLA VOR, we continued south. Towards TALLA, some lightning strikes off to the left started to show on the EHSI stormscope display, but nothing too close, though we were again in fairly solid IMC, flying between layers of stratus, below and above, with broken cumulus around us between the layers. Accordingly, at TALLA, we set course for DEAN CROSS, since this would allow us to descend below cloud over the Solway Firth. Of course, we could have opted for direct to Carlisle, and used the NDB/DME approach, but my philosophy tends to be that a visual approach is preferable if available, and the weather actuals at Carlisle tended to support the idea that we would be able to become visual. This proved indeed to be the case, and we skirted the western edge of the restricted area for Annan power station, and broke cloud at 1800' just north of Anthorn disused. From here it was an easy and familiar journey to join right downwind for R25 at Carlisle.

Our friends in the back seat, and us, were happy to have a cup of tea and some they gathered their belongings (not a lot, I had severely restricted our individual baggage allowances), and they made their way home.

We (my wife and I) set off again to take the aircraft back to its base, climbing from Carlisle to FL45 enroute to the SHAPP reporting point, where we turned southeast towards Harrogate. Though the cloud was broken, we were frequently in IMC for longish periods, though with not too severe turbulence. After QSYing from London Information to Leeds Approach for radar service, we were delighted to be offered, without requesting it - we had planned to fly down the east side of the Leeds zone - a clearance straight through the zone via the overhead. A momentary gap in the cloud below us showed the Menwith Hill listening station's 'golfballs'. After leaving the Leeds zone we were routed direct to the TNT VOR, staying below the L975 airway, and shortly after TNT were able to make an approach to the circuit at the aircraft's home base. Joining the circuit, blind calls seemed to be the order of the day, and we landed just before 4pm - just in time to complete the paperwork, pay the fees, and join the M6 traffic for the journey home to Cumbria.

Our trip had encompassed landings at Sherburn, Carlisle (twice), Oban, Inverness (twice), Kirkwall, Wick, and Dundee. It had been enlivened by some interesting weather, and made especially pleasurable by the warm welcome at almost all of our ports of call. Some very pleasant beer had been consumed, and the aircraft had performed as well as expected, our final leg with a ground speed at times of 180 knots or more. I had learnt to use some up to date avionics, and our navigation had been eased considerably using them.

Exploring acoustic lift in the Islander BN2-XL - Chris Thompson

Undaunted by economic realities, the design team at Pilatus Britten Norman have announced plans for the BN2-XL Islander replacement, promising more noise, reduced payload, a lower cruise speed, and increased pilot workload.

Popham ATC spoke to Mr. Fred Gribble, former British Rail boilermaker and now their Chief Project Engineer. Fred was responsible for developing many original and creative design flaws in the service of his former employer, and will be incorporating these into the new BN2-XL technology under a licensing agreement. Fred reassured current BN2 pilots that all the fundamental design flaws of the original model have been retained and further good news is that the XL version will be available as a retrofit.

Among the new measures, is one of locking the ailerons in the central position. Following airborne and simulator tests which showed that although pilots of average strength were able to achieve up to 30 degrees of control wheel deflection, this produced no appreciable variation in the flight path of the aircraft. Thus, the removal of costly and unnecessary linkages has been possible, and the rudder has now been nominated as the primary directional control. In keeping with this new philosophy, but to retain commonage for crews during transition to the XL, additional resistance to foot pressure has been built in to the rudder pedals to prevent over controlling in gusty conditions (as defined as those in which the wind speed exceeds 3 knots).

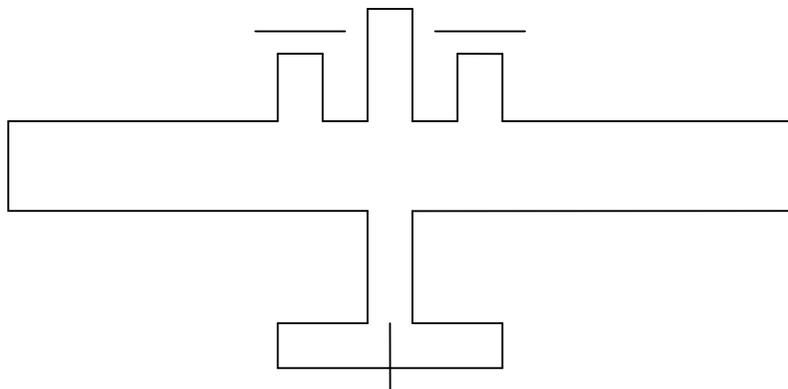
An outstanding feature of Islander BN2 technology has always been the adaptation of the O-540 engine, (which mounted in any other aircraft worldwide, except for the Trislander, is known for its low vibration levels), so as to cause it to shake and batter the airframe, gradually crystallise the main spar, de-synchronise the accompanying engine, and simulate the sound of fifty skeletons fornicating in an aluminium dustbin.

Britten Norman will not disclose the technology applied in preserving this effect in the XL, however, Mr. Gribble assures us that it will be perpetuated in later models and sees it as a strong selling point, stating "after all, Concorde makes a lot of noise and look how fast that goes"!

Design documents clandestinely recovered from the Britten Norman shredder have answered one question which has puzzled aerodynamicists and pilots for many years, disclosing that it is actually noise which causes the BN2 to fly. The vibration set up by the engines and amplified by the airframe, in turn causes the air molecules above the wing to oscillate at atomic frequency, reducing their air density and causing lift. This can be easily demonstrated by any sudden closure of the throttles, which causes the aircraft to fall from the sky. As a result, it has been deduced that lift is therefore proportional to noise, rather than speed, explaining amongst other things, the aircraft's remarkable takeoff performance.

In the driver's cab (as Fred Gribble describes it), ergonomic measures have been taken to ensure that long term PNB pilot deafness does not cause inadvertent dozing. The input from orthopaedic surgeons has produced a seat design and cockpit layout to maximise backache, Enroute insomnia, chronic irritability and terminal (post flight) lethargy. Increased pilot workload is achieved through the redesigned "bull worker" ailerons mentioned earlier.

Special noise retention cabin lining is an innovation on the XL, and it is hoped in later models to develop cabin noise to a level which will enable pilots to relate ear pain directly to engine power, thus eliminating the future need for engine instruments altogether.



Notice how the classic lines of the original BN2 have been lovingly preserved in the impressive BN2-XL.

We were offered the opportunity to fly the XL at Britten Norman's development facility adjacent to the British Rail tea rooms at Little

Chortling. The flight was originally to have been conducted at the Pilatus plant however all BN2 aircraft are now prohibited from operating in Swiss airspace during the avalanche season. For our mission profile the BN2-XL was loaded with coal for a standard 100nm trip with British Rail reserves, carrying one pilot and nine passengers to maximise discomfort.

Passenger loading is unchanged, the normal under wing protrusions inflicting serious lacerations to 71% of the boarding passengers. The usual confusion of selecting the correct door appropriate to the allocated seat, and the facility for the clothing of embarking passengers to remove oil slicks from the engine cowlings during loading and unloading have been thoughtfully retained.

Start up is standard, and taxiing as in all BN2's is accomplished by brute force. Takeoff calculations called for a 250 decibel power setting, and the rotation force for the neutral C of G was calculated as 180 ft/lbs of back pressure.

The initial warning of engine failure after takeoff is provided by the reduction in vibration of the instrument panel. Complete seizure of one engine is indicated by the momentary illusion that both engines have become inexplicably synchronised. Even if this is not noticed, then identification of the failed engine is achieved by comparing the relative vibration levels of the windows on either side of the cabin (relative passenger pallor has been found to be an unreliable guide on some routes due to ethnic considerations).

Shortly after takeoff, the XL's chief test pilot, Captain "Muscles" Mulligan, demonstrated the extent to which modern aeronautical design has left the BN2-XL untouched. He simulated pilot incapacitation by slumping forward on the control column, simultaneously applying full right rudder, and bleeding from the ears. The XL, like its predecessor, continued undisturbed.

Power was then reduced to 249 decibels for the cruise and we carried out some comparisons of actual flight performance with graph predictions.

At 5000ft and ISA, we achieved a vibration amplitude of 500 CTS and 240 decibels, for a fuel flow of 210 lbs/hr, making the BN2-XL the most efficient converter of fuel to noise after the Titan rocket.

Exploring the constant noise/variable speed and constant speed/variable noise concepts we have found that in a VNE dive, vibration reached its design maximum at 1000 CPS at which point the limiting factor is the emulsification of human tissue. The catatonic condition of long term BN2 pilots is attributed to this syndrome which commences in the cereoral cortex and spreads outwards.

We asked Captain Mulligan what he considered to be the outstanding features of the XL. He cupped his hand behind his ear and shouted "Whazzat"?

We returned to the Britten Norman field convinced that the XL model retains the marque's most memorable features while showing some significant and worthwhile regressions.

Pilatus Britten Norman are not resting on their laurels. Plans are already advanced for the Trislander XL and noise tunnel testing has commenced. The basis of preliminary design is that lift increases as the square root of the noise, and as the principle of acoustic lift is further developed, a later five engine vertical takeoff model also becomes a possibility.

(Reproduced with acknowledgment to a very old "Flight International" magazine)

PORK Scratchings 2005 - Dave Thomas

As most of you are aware, Clare and I have the habit of taking G-PORK somewhere different each summer for our annual holiday and 2005 was no different.

Ever since I learned to fly I have had a hankering to fly into Berlin's Tempelhof airport. I have read a lot about it, I have seen many pictures of it; it has always struck me as an amazing place, with an incredible history. It just had to be an amazing experience to actually land there. In 2003, on our trip to Gdansk, we had flown PORK into Berlin Schoenefeld in the South East of Berlin; on a long weekend in 2004 we had flown commercially into Berlin Tegel, in the NW of the city, so it was just a matter of time before we descended on Tempelhof!

Having enjoyed our long weekend in 2004, we decided to plan a trip to Germany again in 2005, to include a stay in Berlin, landing at Tempelhof of course. After that we would fly up to Rostock on the Baltic coast and then return home overhead the Friesian islands, staying overnight in Texel. As usual, we bought all the necessary charts, cleared the dining room table, sharpened our pencils, borrowed the Bottlang from Bob and started planning. It was a long job, and like all planning, was subject to change.

On 11/Jul, we set off for Rotterdam; it was about half way to Berlin and neither of us had ever been there before; we probably won't go there again! We crossed the Channel near to Dover and then over to the 'MK' heading along the coast towards Ostend. Past Ostend, we continued up the coast past Knokke and then over the islands off the coast of Holland. It's fascinating to see the huge bridges joining the islands with locks for boats to pass freely. Rotterdam is a tricky place to approach from the South West because of the complex airspace and the ill-defined waypoints. But, we sorted it all out and eventually landed. From that point on we were treated like royalty -no problems with refuelling, taken to the restaurant, picked up again, and so on. It was only when we came to pick up the bill that we realised why. We should have taken a bank manager or two with us - thank heaven for credit cards! Don't go there! An amusing aside was that when we returned home there was a letter postmarked 'Rotterdam' waiting for us. Ah, I thought, an apology and a refund. No, it was from a radio ham who had heard us calling Rotterdam and wanted details of our aircraft etc. so that he could add details of the call into his

log. I could answer most of his questions but wasn't sure about the aerals on PORK.

After leaving Rotterdam, we headed East along the River Waal to Nijmegen, followed by a fairly boring flight across the North German plain. There is not a lot to see as one heads East; we flew East to the HMM VOR, and then turned ENE, heading for DLE. This took us to the North of Gutersloh, an RAF base that often appears in the news. At all times we were talking to German ATC who, as ever, were superb. It is almost as if they really like looking after British planes as they fly through their airspace. Two other things stick in my mind; firstly, the number of bugs appearing on the windscreen - where do they all come from? Secondly, the sheer number of windfarms that there are. Given that the Germans decided many years ago not to embrace nuclear power, it seems as if wind power is their alternative. In my view, it really does leave a lot of blots on the landscape.

The DLE is just South of Hannover, which we were able to see in the distance. We turned east again, and after a short time passed over the old East/West border. If anything, the land became even plainer as we continued to fly east. As we continued, the charts were shuffled as we brought out the approach plates for Tempelhof, and updated the RNAV box to guide us in. The approach into Tempelhof is via two reporting points (Whisky1 and Whisky2) - the first of which is a road junction to the east of Potsdam. Prior to flying over Potsdam, we contacted Tempelhof approach who asked us to report at Whisky1. As with a lot of these reporting points it is actually difficult to spot where they are. However, if you have enough confidence, they are where they are supposed to be! Sure enough we found the road junction which was actually hidden by all of the blocks of flats in Potsdam, and reported back to Tempelhof Approach who asked us to report Whisky2. This is a tall chimney on the side of a canal leading into the centre of Berlin. There are a lot of waterways out to the west so you do have to be careful to ensure you follow the right one! The scenery below us was increasingly built-up as we continued to fly towards Tempelhof. After we reported Whisky2, the controller told us to report right base for 09L, the northernmost of the two parallel runways, which surprised me because it meant that we had to approach directly over a large block of flats. By this time we had spotted Tempelhof, which was an amazing sight; the airport really is in the middle of the city, completely surrounded by built-up areas - it is no surprise to see that most commercial flights now fly in and out of Tegel or

Schonefeld. As far as I understand it, only short-haul flights, business jets, and the occasional GA aircraft now use Tempelhof. We reported right base and were cleared to land on 09L, being told to land long. Given the proximity and the height of the block of flats on approach, I didn't have much choice anyway. There was no way that I felt I could both clear the flats and hit the numbers. Even landing long, there seemed to be very limited clearance over the flats, and once we were clear, I pulled the throttle to complete what was almost a glide approach. As you are coming in, the appearance of the airport is very unusual. To the north of the runway, there is a small clump of trees, so it feels like you are landing in a forest as that is virtually all you see on the horizon as you are focusing on landing. Once you have landed you then continue on to the end of the runway and exit via a taxiway which takes you around the trees, adding to the whole picture. As you pass the trees, the whole of Tempelhof opens up in front of you. It is a very impressive place. When we went there for a coffee on our trip to Berlin in December, Clare would not believe that it was an airport because it really just looks like a huge office block from the outside, with no aircraft on view at all. Even when you go into the departure hall, you cannot see the apron. But, even then the building's size is impressive. From airside, the buildings are even more imposing. What from landside appear to be office blocks are huge hangers, which when opened up can easily swallow a 737. The main apron is huge, and between the hangers part of the apron is completely covered and could easily be used to park a 737. We taxied past the main apron to the far end and parked next to four or five other GA aircraft. Shortly after we stopped a van turned up to take us and our luggage to the GA terminal where we cleared customs and filled in the usual necessary forms. The guys in the GA terminal were extremely helpful, their English was word perfect even to the extent of being able to laugh at the registration of G-PORK. They ordered a taxi for us and off we went to our hotel.



Tempelhof from a distance



The approach to 09L. You can see the clump of trees in the distance and the vast terminal on the left.



G-PORK on the main apron with the hangers and the covered apron in the background

We then spent three or four days in Berlin, exploring, meeting an old friend of mine, and generally having a great time. It is a fascinating city with a lot of history, and yet parts of it are very modern. Even though the wall has come down (there are limited examples left), the eastern part of the city is still very different from the western. Having been there before the wall came down it seems strange to be able to wander freely through what used to be Checkpoint Charlie and to stand under the Brandenburg Gate. One night we went out for a meal with my pal and were enjoying the food and drink when I noticed that Clare wasn't really with us - she was looking at the lady sitting at a table near to us. Just after I had noticed, the lady in question keeled over, having fainted. Clare promptly went to the rescue and applied first aid. The lady had just fainted for some reason or other. But, my pal called an ambulance which turned out to be a fire truck - the firemen in Germany are also trained as paramedics. They cast their eyes over her and pronounced her fit. She and her friend then both joined us at our table and we had a very pleasant chat - both of them spoke excellent English. Jaan (my pal) said that the last time he had been to that restaurant someone had been taken away on a stretcher, so he will be more wary of using it in future! One morning we went up to the top of the TV Tower and had breakfast in the revolving restaurant (attached photo is Tempelhof from the TV Tower). The view was fantastic, and we enjoyed it so much that we tried to book for a meal that night. However, it was fully booked. Shortly after

coming back from our holiday we decided that we would go back to Berlin for a few days to celebrate Clare's birthday in December. We contacted Jaan to see if he could book the restaurant for us; he could, but it was a close run thing - they had a table left but we would have to be there by 7. It seems you have to book very early if you want to eat in the restaurant.



Departing from 27R - you can just see the TV Tower on the right

After a few days, it was time to head off to Rostock on the north German coasts, so we found a taxi to take us back to Tempelhof. Once again, we were welcomed at the GA terminal and went through the necessary processes. The total bill for the landing fee and four days parking was less than £40! In order to go out on the apron we had to go through security. Security made it clear that although we were both pilots, the baggage of one of us had to go through the X-ray machine. So, I elected to be the victim and had to be searched and my baggage had to go through the machine. It was clear that the security man realised that what he was doing made no sense at all, but he had to follow the process. Unlike, the folk we used to have to deal with at Southampton, this security man seemed to realise the ridiculous nature of what he was expected to do! We refuelled, and then taxied down to the end of 27R, past the grove of trees again. We had to hold for a short while whilst a bizjet came behind us to take off on 27L. After he departed, we lined up and took off, being cleared for a right hand turnout as we were heading off to the east to clear the zone before flying north up to Rostock. As we

climbed and turned out, we could see in the distance the TV tower in (east) Berlin which was over 1000 feet tall. We sharpened the turn to avoid it, but again, it reinforced just where we were and how close to the centre of the city the airport is. We continued over the city until we reached the boundary of the zone and then turned north heading to Rostock. The scenery on the way to Rostock was very picturesque, with plenty of lakes and forests beneath us. As with the journey into Berlin, there weren't a lot of towns or any significant signs of any industrial activity. As we approached Rostock we started to talk to them and were instructed to hold in present position until advised. We then watched a display of circuits by a Eurofighter for about ten minutes! It was very impressive, particularly the take off as the climb rate was just incredible and during the climb, the pilot almost turned the plane on its side as he made a sharp turn to bring him onto the downwind leg. Eventually we were cleared to land and again we were impressed with our reception - very polite and perfect English. After completing the necessary formalities we found a taxi and headed towards our hotel.

Rostock itself is not a very attractive city although a lot of money has been spent recently to rebuild the centre which is now quite attractive. There are some interesting boats moored alongside the quay, and to the north is the seaside resort of Warnemunde which we visited one day on a boat trip. We did manage a trip to Peenemunde where there is a museum built on the site of the V1 and V2 rocket bases.

Once again it demonstrates the massive size of Nazi architecture - the power station is huge, and they only built half of it! According to Bottlang, the airfield there is only for the use of local aircraft, otherwise we would have taken PORK in there. To the east of Rostock there is a spa town called Bad Doberan where is a little steam train which winds its way through city streets and the countryside out to a lovely coastal resort where they plan to hold the next G8 summit. I wonder if the locals know what they are letting themselves in for in terms of the security requirements?



Trabant convertibles on sale on the way to Peenemunde!

Our hotel had internet access so we were keeping a close eye on the weather. It had been our intention to return home via the Friesan Islands off the north coast of Germany and Texel. However, we could see bad weather coming in from the north so we decided in the end that we should return home rather more directly. The wind was also quite strong from the west so that instead of being able to return home in one hop, we elected for two. The first hop was into Munster-Osnabruck where we received excellent service again even having a personal chauffeur to drive us around which saved us a lot of time and effort. From there we flew to Ostend where we had an excellent meal in the airport restaurant, before departing for Bournemouth.

All in all we had a great trip, particularly the flights in and out of Tempelhof. The total number of hours we flew was thirteen and a half; G-PORK didn't miss a beat.

A Camping Trip to Alderney - James Mason

The idea for a flying club trip to Alderney came from Nigel Waters who discovered a seafood festival taking place during May. He enticingly dangled this bait and reeled in two other aircraft from Bournemouth and Filton. Just to make sure that no one wriggled off the hook, he also offered up a cooked English breakfast in the morning cooked with avgas so we were really cooking on gas, more on this later.

The plan was for us to depart on Friday afternoon, arriving in Alderney around 6:30pm, Jason, Helen and Michael would be flying from Filton, Nigel and Sarah from Wycombe with myself and Chris coming from Bournemouth. As we browsed through the met reports on Friday, the weather was not ideal but was improving and on leaving work it was a pleasant spring day. As I drove to the airport, I was looking forward to a nice relaxed flight with plenty of time left prior to departure. Alas as I reached the airport to my horror I realised that I had not placed the lifekit in my boot! I had time to go and fetch it but this was not quite the start I had intended. On the way back, my mobile rang and Nigel told me that he had problems with his flight plan as there was some confusion about the closing time for Alderney. I had previously checked and called Alderney and confirmed that it was 19:30 local but suddenly it looked as though things were going rather pear shaped. However after losing an hour or so I was back at the airport with all the kit and Chris had arranged refuelling of the aircraft. I calculated that with an 18:30 departure and 40 minute en route time then we would comfortably reach Alderney before closing.

We actually lifted off at 18:30 local, it was a good team effort to get back on track since this was Chris's first cross channel crossing and we were both wearing immersion suits which add some more time to preparation. The weather was actually very pleasant with almost clear blue skies as we departed east of Swanage towards Alderney. We heard Jason on frequency and I had also spoken to Nigel just prior to his departure so things were beginning to look good again and I settled down to enjoying the flight. However as we approached Alderney, we saw about the only cloud we had seen on the whole trip perched over the top of the island! I was cleared to land on runway 26 but on finals I could not maintain VFR and so had no choice but to go around and asked to orbit on the downwind leg to assess the situation. A commercial flight, inbound to

Alderney, was on frequency and I was considering a diversion when we were offered runway 32 instead which is grass and 732m. However at that time we became visual with 26 again and were cleared for this runway, a few minutes later we landed at 19:15. As we were shutting down, the commercial aircraft landed which signaled the closure of the airport. We just about managed to complete all the formalities before the building was locked up and we moved into the car park to wait for a taxi.

I think we had all enjoyed our flights although it seemed that none had gone precisely to plan but it certainly felt good to be on Alderney. The campsite at Saye is at the opposite end of the island to the airfield so we needed taxis to get down there, with the benefit of experience it is worth hiring a car for a group. The campsite at Saye is in a very attractive location just behind sand dunes, in my experience they are very helpful and will also rent you a tent so you don't actually need to carry one if you are short on weight. There was a fair wind blowing across the campsite but the tents went up fairly quickly and we just about managed to get finished before it got dark.

It turns out that restaurants tend to close by 9pm in Alderney at that time of year which was also unanticipated but fortunately we were able to make arrangements with our taxi driver to visit an Italian restaurant that night. I don't think the first Peroni touched the sides on the way down as we unwound after our trip. When we returned to the campsite, we noticed how much you could see in the night sky, of course Alderney is not affected by much background lighting and is certainly a placed for star gazing.

The next thing I remember is being woken in the morning with a cup of tea and hot sandwich cooked by Nigel and Sarah. Since we are not allowed to carry gas cylinders when flying, arranging camping stoves has been a bit of a problem. However an ingenious solution is to use a fuel based stove powered by avgas which can be drained from the aircraft tanks. Nigel had found an ideal strainer in a US flight shop catalogue and Jason managed to pick some up for us on a business trip. The avgas cooker worked very well, I can testify that the tea and sandwich were excellent!

After breakfast, we started some serious flying when Jason and Nigel got the kites out, the conditions were perfect with a good breeze and a clear day, perhaps we should have a spot the kite competition!



Later in the morning, we hired a car to make it easier for us to explore the island and managed to find a seven seat Peugeot which did the job admirably. At this time, the party was getting into full holiday mood!



Unfortunately, I had to get our aeroplane back to Bournemouth before Sunday so Chris and I had to leave late afternoon. After a good lunch and some touring around the island we were dropped off at the airfield and I

arranged to depart with a flight along the island and an orbit around Saye where Chris managed to get this great picture overhead:



I really enjoyed the trip although I think we all agreed that there was not much sign of the seafood festival, however that did not really matter since we found that Nigel can do a great cooked breakfast!

Procedures on how to fly a Buccaneer – Chris Thompson

1. Approach the buccaneer with a reckless, devil may care attitude, especially at night as this makes a big impression on the bystanders.
2. Ask the Flight Sergeant what day it is and mark it down in chinagraph on the nose of the aircraft. Then ask what time it is and mark this down too. Stow your chinagraph pencil in a convenient place for future use. (NOTE: We have found that just inside the intake duct is the most convenient place available - however, we have been losing a great many chinagraphs this way).
3. (PREFLIGHT) Conduct your preflight in a rapid but deliberate manner. Be sure to kick the tyres vigorously. When you come to a complicated part of the aeroplane like a wing butt or the air brake, stare at it seriously for several seconds before going on. This creates a favourable impression on the Flight Sergeant and makes him think that you know what you are doing. Try to avoid shaking your head or clucking as this tends to worry the engineers.
4. When you have finished the preflight, check the tail number of the aircraft, then proceed rapidly to the one you were supposed to take and repeat steps 1 to 3 above.
5. To enter the aircraft, approach it and leap lightly on to the access ladder without looking.
6. Pick yourself up off the floor and carefully relocate the access ladder securely and climb the steps. (NOTE: Try to control the tense feeling in your stomach and above all DO NOT LOOK DOWN - this is the most difficult part of the flight and must be done with precision and in an outstanding manner). Enter the cockpit in any manner you choose, carefully trying to avoid going in head first.
7. Carry out the disentangling procedure, sorting out oxygen hoses, radio leads, shoulder straps, electric hats, gloves, knee pads, seat pins, inflatable life rafts, old issues of Men Only and Penthouse, and any other loose ends found in the cockpit.
8. Check the position of the of the stick and throttles. If the stick is on your left and the throttles are on your right then you are in the cockpit back to front (thus explaining any problems encountered in step 7). Do not panic, smile at the Flight

Sergeant, wave to the bystanders, and slowly rotate through 180 degrees, remembering to unstrap before going through this rotation. Restrap in - now arrange the switches, levers, and buttons in the cockpit in a pleasing and eye-catching manner and prepare to start the engines (if they are installed in the aircraft - and in case this was missed in step 3).

9. On starting the engines, advance the throttles to 85% power and standby for the marshalls signals. If he is waving at you, resist the temptation to wave back. Rapidly rearrange the position of all the switches, levers, and buttons until the correct combination is found, then reduce the power and the marshaller will probably stop waving.
10. When the signal is given to taxi, advance the throttles to full power and roll smoothly over the chocks. Retard the throttles to 90% power and try to avoid further use of full power while taxiing as this makes the brakes smoke (thus annoying the engineers), and irritates the flight line personnel (not to mention the Group Captain and Station Commander).
11. If, after turning out of your parking slot you see another Buccaneer taxiing towards you, stop quickly and make a 180 turn to go back the way you came towards the other end of the runway. You have committed a rather serious blunder.
12. After arriving in the vicinity of the takeoff position, immediately start your engine run-up and call the Tower every three seconds. This accelerates the takeoff process and gets you airborne a lot quicker. Wait until at least half way down the runway on the takeoff roll before unfolding your wings as this gives the spectators a thrill.
13. After leaving the ground, rotate the aircraft to 50 degrees up attitude, close your eyes and count to ten. Provide contact with the ground has not occurred in this time, you must be flying, so continue your mission as briefed (NOTE: you may open you eyes for the remainder of the flight of you wish, however this is optional and up to your discretion).
14. After landing and avoiding the semi-controlled crash, let all the fire crews and aerodrome staff breathe again. Avoid jumping nonchalantly from the cockpit until the Flight Sergeant has replaced the steps.

Santa's Delivery Run - Clare Grange

This particular Christmas Santa had to begin his rounds earlier than usual, not only because there were more presents to be delivered, but also because Rudolph and his pals decided they wanted to enjoy the scenery and refused to fly faster than 120 knots.



Santa loaded the sleigh having planned his flight thoroughly and ensured the weight and balance were within the normal range. He then checked the weather (CAVOK and wind variable at five knots) and the NOTAMs paying particular attention to the danger areas on his planned route. Fortunately, because of the time of year, it seemed all the danger areas were inactive. This was a relief as it meant Santa could take a more direct route for part of this journey. Santa departed runway 30, TORA 2354m from airfield position N51 23.8 W003 20.6 and shortly after take off turned approximately eight degrees right to head for his first

waypoint. This waypoint is a well known steel works with masts at 534 ft amsl. Santa found his in flight conditions changed from VFR to "IFR" or more correctly IFM4 for this leg and he flew for eleven and a half minutes.

Santa then turned left on to a magnetic heading of 265 degrees and flew for a further 18 nm turning overhead the coast at a point which could be translated as tete de ver. He then continued his journey northwards flying for a further nine minutes to bring him overhead a large town with a heliport from where he turned on to a magnetic heading of 250 degrees for approximately thirteen and a half minutes. This brought him to the birthplace of a clever man (he had the reputation of being a miser) who became the victor of the Battle of Bosworth in 1485 and the first of a line of monarchs whose reigns lasted from 1485 - 1603. One of the victor's sons is infamous for his matrimonial shenanigans amongst other things. The victor's mother is famous for founding St John's College, Cambridge. Rudolph and his pals absolutely loved the scenery and refused to go any further until they'd orbited and taken some photographs to show Mrs Claus.



Santa let Rudolph take charge of the sleigh for a few minutes whilst he checked his itinerary before proceeding to his next delivery point.



Santa then flew on to a magnetic heading of 325 degrees for a further 16nm which brought him overhead the smallest city in the UK. From there he tracked towards a nearby VOR and flew from it on a radial of 038 degrees. Santa had insisted they all wore life jackets and proceeded to fly through the inactive danger areas, through an area of intense aeronautical activity and well underneath the airway on his route, to arrive 31 minutes later overhead an old fortification begun in 1283 during the second campaign of the "Hammer of the Scots" also known as "Longshanks". It was during this time that a particularly barbaric form of execution was introduced with a rebellious Scot, of brave heart, suffering the full horror. Santa did not want to dwell on such awful deeds and turned the sleigh away finding himself, approximately three minutes later, overhead a beautiful village famous for its pottery and "The Prisoner". Immediately north of the village Santa flew over a town which is the starting point for a steam railway. Again Santa's in flight conditions changed to "IFR" as he "tracked" towards the railway's north eastern (ish) terminus.



Santa was very pleased to deliver lots of presents in this town as it is quite a depressed area but the scenery en route was stunning. Santa then turned on to a magnetic heading of 286 degrees for a further 6nm to bring him overhead a village where a faithful hound is buried. Ten nautical miles later, in a north westerly direction, Santa set up Rudolph and pals for the approach into an airfield by the sea. They landed on runway 20, LDA 1031m, Santa parked the sleigh beside a very smart Grumman Tiger and took Rudolph and the other reindeer off for some refreshment. Santa had a nice cup of tea and mince pie whilst the reindeer were allowed to graze.



Half an hour later Santa returned to the sleigh, having checked the weather, which had not changed, and was very amused to see two of the Grumman's passengers getting into the spirit of things! Santa averted Rudolph's eyes but he couldn't help wondering what sort of mood Mrs Claus would be in when he arrived back home!



Santa then checked the sleigh, harnessed the reindeer into position, and was about to climb aboard when he heard a bit of a rumpus. The Grumman passengers were being reprimanded by the owners for their lascivious behaviour and told to put a stop to it!



Santa thought he'd better not interfere and departed from runway 02, turning right by about twenty degrees, to follow the planned route to his next delivery point which he arrived over approximately 6.5 minutes later. The route took him over a stretch of water and a wonderful bridge, built by Thomas Telford, to another fortification - Longshanks' last.



Santa turned on to a magnetic heading of 140 degrees and soon (approximately fourteen minutes) flew over the north eastern tip of a sausage shaped lake with a town close by. Once again the scenery was spectacular. Ten nautical miles further Santa thought he'd practice a little tracking and selected the frequency for a nearby NDB which he managed to follow albeit a little erroneously. He somehow arrived near to the NDB, although he could tell from the way the ADF needle moved that

his tracking left a bit to be desired, and delivered more presents. The next drop point was a further 25 nm on a magnetic heading of 160 degrees. Santa debated about whether or not to track towards the NDB at this particular place but, not encouraged by his previous performance, he decided against the idea. Anyway the weather and scenery were gorgeous and he was enjoying the views. Santa delivered the presents, turned on to a heading of 169 degrees magnetic and after approximately four minutes he entered an inactive danger area in which the military elite, whose activities and identities are shrouded in secrecy, are trained.

Santa, Rudolph and pals continued on their journey and were now looking very forward to some rest. They passed over the older of a couple of bridges (Santa understood the toll was quite expensive) and Santa spoke to the controller at his final destination. The controller offered Santa vectors for the ILS, which he accepted, and flew an excellent approach. This helped to make up for his poor NDB tracking and made Santa feel better about his instrument flying. Santa followed the taxiing instructions and was directed to park his sleigh next to G-BOAF. Santa looked longingly at this aircraft and, although Christmas is the season of goodwill, he found it hard to think kindly towards those whose decisions had grounded such a wonderful aeroplane. Santa was then surprised and pleased to see Mrs Claus coming towards him. She had presents for the reindeer and greeted Santa with a big kiss. Santa was a bit embarrassed but pleased really and they went home hand in hand. Rudolph and pals were pleased to see how happy they were and trotted along behind for a wonderful Christmas.



And finally.....

The Miracle of Christmas!



Questions:

- 1) Which airfield did Santa depart from?
- 2) What is the name of the well known steel works?
- 3) Where is the birthplace of the miserly man and who was he?
- 4) What was the name of the line of monarchs?
- 5) What is the name of the smallest city in the UK?
- 6) Name the airway Santa flew under?
- 7) Name the VOR Santa used.
- 8) What is the AIAA Santa flew through?

- 9) Who was the Hammer of the Scots and who was the rebellious Scot barbarically executed?
- 10) What is the name of the beautiful village associated with pottery and "The Prisoner"?
- 11) Name the steam railway and its north eastern terminus.
- 12) What was the name of the faithful hound?
- 13) Which airfield by the sea did Santa land at?
- 14) What is the name of the bridge built by Thomas Telford?
- 15) What is the name of the Hammer's last fortification?
- 16) What is the name of the sausage shaped lake?
- 17) Which NDB (including frequency) did Santa track to?
- 18) Who are the military elite?
- 19) What is the name of the bridges Santa passed just before his final destination?
- 20) Which ASRs did Santa depart and arrive in?
- 21) What was Santa's final destination?

Please email answers to clare.grange@onetel.net



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