## APRIL 2010

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## GUILD VISITS PROGRAMME

- **17 May**: School of Engineering (incorporating College of Aeronautics), Cranfield University
- **26 May**: Army Air Corps, Wattisham Airfield
- **12 June**: Garden Party, RAF Brize Norton
- **22 June**: ’Ladies Day’, Windsor

Please see the Flyers accompanying this and previous editions of Guild News or contact Liveryman David Curgenven at guildevents@dcai.co.uk.

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**Cover Picture**: Guild News reaches the Southern Continent. Liveryman John Eacott proudly displays the reading material - Guild News - that he took with him to the Antarctic Continent on a recent helicopter support mission for a French scientific expedition. Guild News can now be found in every continent on the globe! Sharp eyed rotary experts may note that the helicopter has its rotors running whilst the pilot is out of the cockpit; this is permitted by the Australian authorities in skid equipped helicopters provided the controls are locked. John’s report on the flying in support of the expedition is on page 15.
In this edition of Guild News

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DAWN TO DUSK AWARD FOR PROFESSOR DIANA GREEN. The Dawn to Dusk Competition is an annual challenge and the 45th event took place in 2009. The aim of the challenge is 'To encourage the most interesting employment of a flying machine within the limits of competent airmanship and to demonstrate the capabilities of pilot and machine in a day’s flying, during the hours between Dawn and Dusk, in terms of furthering some original and praiseworthy objective.’ All flights can start and finish from any part of the world and must be a minimum of 8 hours. The competition is judged by a panel of Judges under the Presidency of the Guild’s Patron, HRH The Duke of Edinburgh KG KT. Assistant Professor Diana Green’s flight, a 4-aircraft formation flight around the UK islands to raise funds for the Flying Scholarships for the Disabled Trust (described in the October 2009 issue of Guild News) was awarded the Coventry Trophy, coming in second place. Three of the team were able to attend the presentation of Trophies ceremony in the RAF Club; the accompanying photo shows Professor Green receiving the Trophy from the Master, accompanied by Edwin Brenninkmeyer (lead pilot) and Dierk Reuter. See page 20 of this issue for a description of the entry that came in fourth place, ‘Third Time Lucky?’.

TRICKY TOWN CENTRE HELICOPTER LANDING. Past Master Arthur Thorning reports: ‘The pilot of the Hertfordshire Air Ambulance had to perform a tricky landing in the middle of Hitchin’s old Market Place on 5th February. The helicopter had been called to take an elderly man to Addenbrooke’s Hospital at Cambridge after he sustained serious head injuries falling down the stairs of a local snooker club. Local police had barely enough time to clear an area and warn traders the helicopter was on its way. Canvas awnings and the furniture of an open air coffee stall had to be quickly dismantled and moved to avoid the downdraft from the aircraft’s rotors. After a low circuit to assess the layout of the square, the pilot, Mike Sheppard, landed his aircraft gently on the cobbles in front of the old Corn Exchange. Richard Whitmore, a former BBC newsreader, who saw the landing and provided additional reporting, said ’It was a really impressive piece of flying. I spoke briefly with the pilot while the medics were preparing the injured man for the flight and apparently the trickiest part was the final few seconds when he had to fly between the square’s ornamental clock and a lamp post with little room to spare on either side.’

GUILD MEMBER HELPS IN HAITI. Upper Freeman Ralph Goettlinger, who joined the Guild in 2008, is flying the only civilian European sponsored helicopter on relief work in Haiti. He writes: ‘I’m here for three weeks, flying the only civil European helicopter down here. The helicopter, a Eurocopter AS 350B3 + Squirrel, was flown out in a Russian cargo aircraft. Our mission is to bring the people food and other things they need, but also Medevac missions. There was a small hospital in the north of Haiti, over 80km from the epi-centre of the earthquake, that had three operating theatres intact. Under normal conditions the hospital had 65 beds but after the earthquake was treating about 400 patients. The journey time overland from Port au Prince, if possible, would take 8 - 10 hours, so an air bridge was established between Port au Prince and the hospital and we transported as many patients as we could, sometimes more than eight a day. A very interesting mission and also a challenge with a lot of mountain and external cargo flights.’ The accompanying photo shows Ralph at work, surrounded by grateful locals. He hopes to return to Haiti again for a second mission, as long as funding can be obtained from the German organisation ‘Ein Herz fur Kinder’ (A heart for children) that financed the first mission.
Luncheon Club event of 2010 took place at the Ballroom on a cold Wednesday, 10th February. The Ballroom was packed to the capacity with Guild members and their guests, to be regaled, after an excellent lunch, by aerobatic expert Brian Lecomber. His talk was titled 'Try not to roll below 30 feet. Lessons from 2000 aerobatic displays.'

In-cockpit video showed just how demanding, both physically and mentally, anti-g suits worn in military aircraft. It was a truly eye-watering experience and a great way to celebrate 10 years of the Guild Luncheon Club.

LIVERYMAN RUSSELL TAPP. The Court was sadly informed in January of the sudden passing of Liveryman Russell Tapp - former Chairman of the Queensland Working Group of the Guild's Australian Region. While recently visiting the UK, Russell had agreed to crew a yacht with friends on a trans-Atlantic trip. He was a yachtsman of considerable experience and achievement, however, despite being in a safety harness, was swept overboard during a storm and drowned.

Russell joined the Guild in 1969, becoming a Liveryman in 1984. As well as an indomitable and key member of the Queensland Working Group, he held a number of various posts during his time in the Guild on the Executive Committee of the Australian Region. A very well attended Memorial Service was held in Brisbane where the Queensland Working Group Chaplain, Liveryman Dr Tony Hall-Matthews, was the speaker.

POULTERS COMPANY PANCAKE RACE 2010. Tuesday 16th February saw the 6th Annual Pancake Day Race organised by the Poulters Company. Enthusiastically supported by the Learned Clerk our Guild put together a team of four, as per the rules, consisting of one Master, one lady and two ‘also-rans’. In the end, one of the ‘also-rans’ in the form of our esteemed Treasurer had to pull out at the last moment and the knees of our ‘First Reserve’, the then IPM, buckled at the thought of actually having to run so our number was reduced to three.

The weather was also against us with the heavens opening to an almighty clap of thunder louder than the starting gun. The rules are extremely complicated but, basically, competitors must run in a Livery gown with an apron and a chef’s hat; that is everyone except the designated ‘lady competitor’ who must also wear a skirt that comes below the knee. In addition one team member is nominated as the ‘joker of the pack’ and must wear attire appropriate to the Lord Mayor’s chosen charities, in this case, cricket pads and musically themed headgear, representing the Cricket Association and the LSO.

THE GUILD BENEVOLENT FUND. On Tuesday 19th January 2010 the Board of the Guild of Air Pilots Benevolent Fund met at the RAF Club for the AGM. Past Master Rod Fulton retired as the Chairman and has been replaced by Captain John Robinson. The new make up of the board is shown to the right. The ratification of the appointment of Trustees was approved by the Court of the Guild on 21st January 2010. Guild members are reminded that full details of the Benevolent Fund can be found on the opening page of the web site under the drop down menu ‘About the Guild’ and also embodied within the member’s pages relating to Charities and Trusts.

The Board would like your help in ensuring the future ability of the Fund to continue with its benevolence. Please give generously, after all it is YOUR BENEVOLENT FUND!

The Board of the Fund

The Master Ex Officio
The Master Elect Ex Officio
The Clerk Ex Officio
Captain J B Robinson Chairman
Squadron Leader J W Davy Treasurer
R W Bridge Esq Trustee
Group Captain T Eeles Trustee
Captain R Felix Trustee
Captain C J Ford Trustee and Almoner
Captain C J Spurrier Trustee and Secretary
Miss S Christie BALPA Representative
Air Commodore P Hughesdon RAF Benevolent Fund Representative
Mr D Howard-Budd SSAFA Representative

Notwithstanding their boundless enthusiasm, your representatives were magnanimous in allowing the opposition the opportunity to run in more heats than themselves, by contriving individually to come last in their respective races. This ‘spur of the moment’ plan was occasioned by the extreme cold and the thought of a free lunch with wine in the warm confines of the Guildhall Crypt. At the back of all our minds was the old adage; it’s not the winning that’s important but the taking part.

To use that old cliché of a picture being worth a thousand words, here are some snaps of our ‘team’:
The Master Writes

DR MICHAEL A FOPP

Off we go then on the journey for the Guild and the journey for your new Master. I’ve been surrounded by aviation since I was brought home from Sleaford hospital’s maternity ward to the RAF College Cranwell where my father was instructing the first post-war intake of cadets. When I wasn’t pressing my nose against the fence to glimpse anything with wings (and later rotor blades) I was looking skywards in wonder. What would it be like to be up there in the blue sky; where was that aircraft going; who was being carried; how far; how high? As I became an adult I was supposed to “put away childhood things”, but who of us did? I was from the generation of Meccano building sets and Hornby 00 electric trains. We devoured the cutaway drawings in the centre spread of the “Eagle”, and anything else which gave us the information to understand how things worked. How did we end up? Well, most of you spent a career in aviation and rose to high rank or status in the profession. I turned two boyhood passions under the umbrella of Meccano into two fulfilling careers - horses and history. But, I have never carried passengers or freight for hire or reward and I’ve never flown aircraft to train for, or participate in, war. For me flying has been a thirty-year recreation which I have endeavoured to carry out as professionally as I’m able. In order to do this I may have gained commercial & instrument ratings, but these are ‘devices’ to carry me out as a professional. For me I have chosen to fly to learn as much as possible as I fly - the endless learning that I think all pilots have. I have also received advice from them all. I have also sought counsel from outside the Guild and this has reinforced my view that our Company is held in very high esteem throughout the City and in the aviation world. Because of my years at the grassroots end of aviation I have decided that, if I can, I will try to bring attention to that sector, for it often lacks the reflected glow that large PR budgets can bring. There is a real risk that the recreational end of flying could be threatened by those who believe it is nothing more than a plaything of the rich. There is also a threat to the smaller commercial operators by a creeping tide of bureaucracy designed more for the commercial giants than the small air taxi or charter operator. We could even see a form of maintenance and training “tourism” as the European market is skewed by National regulators charging discounted rates in comparison to our own CAA (who are required by the Treasury to add a higher levy on their charges than any other European regulator). The military also face huge challenges with the imminent Strategic Defence Review. Even the air transport sector is threatened by the recession and false accusations about the effect of aviation on the environment. Aviation is an easy target which has been re-learning golf after a thirty-year lapse and I have joined our own Masonic Lodge “Per Callum”. You should see your Master all over the place this year!

The most important aspect of my philosophy for the year is that it should be enjoyable for us all! To this end I fully intend to take part in our social and visits programme, coupled with a variety of other Guild activities. I hope that I will be able to participate in all that the Guild does in one shape or form. I only await the return of my medical certificate to rejoin our own Masonic Lodge and I am very proud. He is a fine young man and holds a commission in the Royal Air Force, but we owe his life to the skill and devotion of Great Ormond Street Hospital (you can see details at www.gosh.org/kiss-it-better/). We hope that you will help us to hand over a bumper sum when our year is over.

Rosemary and I have a son of whom we are very proud. He is a fine young man and holds a commission in the Royal Air Force, but we owe his life to the skill and devotion of Great Ormond Street Hospital, so it will be no surprise to you to learn that our charity this year will be “Kiss It Better” a fund to study childhood cancer being undertaken by the Great Ormond Street Hospital (you can see details at www.gosh.org/kiss-it-better/). We hope that you will help us to hand over a bumper sum when our year is over.

Finally, I thank you all for giving me the opportunity of a lifetime and look forward to seeing you during the year.
For a mover and shaker in aviation, Dr Michael Fopp has unusual antecedents. He was neither a Service nor an airline pilot, and his original career had no aviation aspect to it at all; nonetheless he manages to be more RAF than the RAF and his judgement is prized by the politicians, Air Marshals and civil servants who dominate the lives of those who fly. He has an unparalleled knowledge of the aviation industry, particularly military and general aviation, and is a world authority on aviation history. A technophile and a polymath, he has built his own high-performance aircraft and flown all over the world. But trying to get him to talk about certain intriguing facets of his life is like pulling teeth; he dismisses being stabbed and beaten up with an airy wave - nothing to do with flying, he says. His three commendations for bravery are ‘of little relevance’, but I beg leave to submit what little I have discovered in evidence, because it goes to the character of the man, and that’s the important thing. He is hard-working, impatient of inertia, an innovative and driven slayer of sacred cows, but he is also self-effacing and reticent, and when you start to look into his background, you begin to see where he gets it from.

Michael Fopp may never have been an RAF pilot, but he was born in a blue uniform and its traditions are etched into his bones. His father Desmond came from Australia in 1937 to join the RAF Volunteer Reserve, and as a Sergeant Pilot fought in the Battle of France, flying Hurricanes with 17 Squadron. He clearly shared the reticence of his son, for it’s taken Dr Fopp a lifetime to piece together his father’s story, from speaking to his contemporaries, and from the archives. “I would find something out and confront him with it, and he’d confirm that yes, that had probably happened, they just didn’t speak about it. I know a great deal about him, but most of it is from talking to other people.”

Desmond was shot down during the Battle of Britain and badly burned. “It was September 3rd, 1940,” Dr Fopp says. “Over Brentwood two of them attacked a formation of 60, mostly Do 17s - not uncommon odds at that time. My old man ran out of ammunition, so he turned into them and they scattered. The formation was protected by Me 110s, and one got underneath him and shot through his radiator. His clothes and his parachute were smoldering as he came down. He was blinded for a month and had three months in hospital, then when he got out, like a typical fighter pilot, he rolled his MG and was sent straight back to hospital again.”

As a Flight Lieutenant Desmond Fopp went on to Spitfires, forming and leading 132 Squadron on ‘Rhubarb’ sweeps over Europe. Post-war he instructed Auxiliaries on Meteors and was proud of the fact that he never lost a student; the Meteor was a dangerous piece of kit. Later, he became one of the RAF’s first helicopter pilots and set up what is now the rotary element of 32 (The Royal) Squadron, pioneering the first heliroutes through London.

Dr Fopp’s earliest memory is of standing in an RAF-issue wooden playpen by the perimeter track as his father led out a line of Meteors a few feet away. “All the pilots waved to me as they went past,” he says. “I was perhaps three years old, and I’ve had a particular interest in the Meteor ever since.”

With such a background, it was a given that Dr Fopp would join the RAF, but for a brief period in his youth he was stricken with debilitating hay fever. “That was a complete no-no in terms of RAF flying,” he says. “My father took me aside and said, ‘You might be able to conceal your hay fever from them for a time, but eventually it will catch you out.’”

However, there was an alternative enthusiasm to aeroplanes, and that was horses. “I had been taught to ride properly by a former Wehrmacht officer in Germany and had grown to love everything equestrian, so I planned to make a career with horses.” But how? At six foot two he made a poor jockey, and Army riding didn’t appeal. “I saw in the police force everything I was looking for as a horse master,” says Dr Fopp.

“I was determined to become a mounted policeman, but it was far from a sure thing. The year I got in, only 4 people were chosen from 80 applicants. What’s more, I turned up with a broken arm and a stab wound, which I’d suffered while arresting a drug dealer in Soho.”

“My time riding horses in the police was a minute part of my overall career” he says. “Suffice it to say that in those days - and I hope we don’t go back to them - London was a fairly violent place and you couldn’t do the job without meeting with violence on a fairly regular basis.” In 1979 the National Front was exercising its right to freedom of speech by holding rallies in ethnic minority areas, the Socialist Workers Party set out to disrupt them, and the police were present to protect the public. During a riot in Southall Dr Fopp suffered a serious back injury when the mob tried to drag him off his horse.

Thus ended his riding career, but while a serving policeman he had been lecturing and writing on ‘aviation history from 1936 to 1955’, and his courses at three colleges were extremely popular - some of his students are now working in museums or are noted aviation historians. He became well-known at the RAF Museum, Hendon and set up the Friends of the Museum. Hearing of his injury, the then-Director wrote to him saying that if he wanted to change careers, there was a job for him at the Museum. He didn’t have to ask twice.
Dr Fopp says: “After a year or so I decided to improve my academic qualifications. I did a Masters in Arts Administration, which covered ballet, theatre, visual arts, art galleries - nothing too similar to museums because I felt that they needed updating, and that other areas of the arts world were further ahead. It was clear to me that the organisational culture of museums was more suited to the civil service model than an entrepreneurial attraction, which is what they had become. I went on to gain my PhD on managing non-profit organisations, which allowed me to write the standard textbook for museum studies students on managing museums and galleries.”

“The Battle of Britain Museum had opened in 1978 and was already losing money. So I put a proposal to the trustees that we should run it commercially, and they agreed to try. Within a year I went from Research Assistant to Keeper of the Battle of Britain Collection. I recruited new people on different terms and conditions and we ran what is now the Battle of Britain Hall separately from the main RAF Museum, but on the same site. We charged for admission, which was anathema to national museums at the time; we put on temporary exhibitions, installed audiovisuals, TV, film, talking heads - and we had more visitors than the RAF Museum on the other side of the car park, and it was free! I set up a trading company to handle the commercial activities of the whole museum, and very soon we were funding part of the deficit at the main museum.”

At the same time, Dr Fopp learned to fly. “I went to the London School of Flying at Elstree and was taught on the Grumman AA5a Cheetah. To me it was much the same as riding a horse, in terms of hand-eye-foot co-ordination, and I just loved it. Elstree is a great place to be trained - you’ve got noise co-ordination, and I just loved it. Elstree is a great place to be trained - you’ve got noise - typical of those days! I became the average GA pilot on a low budget, flying when I could afford to. Then in 1985 I became Director of the London Transport Museum, earning a little more, and I could afford to fly more frequently.”

The LT Museum in Covent Garden was also to thrive on Dr Fopp’s inspired lateral thinking. One of his innovations was to invite visitors to ‘Test Drive the Museum’ with a ‘Stay & Pay’ scheme which allowed people in free, and charged them if they chose to stay more than 30 minutes. It was an extraordinary success. Visitor numbers rose from 100,000 to over 700,000 before the scheme had to be stopped because the museum couldn’t physically handle the volume. Dr Fopp also became chairman of the London Transport Flying Club at Fairoaks, having convinced LT that he could restructure it into a stand-alone business and transfer it to its members. The LT Flying Club is still thriving today, partly because of the disciplines that were put in place at that time.

“The RAF Museum, in my absence, had built up a debt of £1.8 million on a loan it had taken out to build the Bomber Command Museum,” he says. “The Trustees had gone to the Treasury for help, and one of the conditions of a bailout was a management review which recommended a more commercial approach. In 1985 I received a call saying that the post of Director would become available; so I applied and got the job. It turned out to be very hard work because the Museum was in serious trouble.”

“We needed a profound change of attitude. I made it clear to the staff that this was not a democracy and that I made the decisions - that’s what they needed at that time - they certainly don’t today! They felt they were civil servants who worked for the public, who owned the collections and shouldn’t have to pay. Some were moved, some left, and we started introducing commercial disciplines”.

“The Museum’s grant funding was cut by 30% for five years in order to eliminate the outstanding loan, so from the day I walked in we lived in lean times. I recruited people with business and marketing backgrounds, and we emphasised attractions and activities that gave us a good margin. Admission charges came in and other commercial ventures were launched. We introduced simulators and I asked Cathy Pacific to sponsor the first one. I knew Cathay wanted to build business in Europe - we sold tickets which were facsimile boarding passes, these went into a draw every month for two first-class tickets to Hong Kong; this gave Cathay a mailing list of people in Europe who were interested in their new services from Heathrow. It was good marketing, and wholly new to the Museum. We turned offices into conference rooms and brought in staff to run a conference business. Sotheby’s held historic car auctions, with the cars parked under the aeroplanes.”

Dr Fopp, who taught himself to programme computers in three languages when most people of his era were looking askance at PCs and hoping they would go away, also started the digitisation of the photograph and archive collections with a view to selling them online. For ten years he was Chairman of ‘MDA’ (now ‘The Collections Trust’), the national organization which sets and controls documentation standards in museums and galleries. He was therefore instrumental in helping all UK museums enter the digital age we now take for granted. He was also the President of the International Association of Transport and Communications Museums for ten years in the 1980’s and led that organization through fundamental changes in attitudes and practices throughout the World. Apart from the potential to make the museums money, the digitization of collections made accessible a lot of information that was previously indexed only in the curators’ heads and was lost when they retired.
Dr Fopp threw himself into the Museum at every level - he was known for having cleaned the Sunderland with a broom and bucket; he sand-blasted the crashed Hurricane displayed in the Battle of Britain memorial area - and, as he built up a team that shared his vision and his enthusiasm, the Museum went from strength to strength. Following the period of debt it took a number of years to regain the confidence of MOD, but by the end of the 1990’s Dr Fopp’s measures allowed grant funding to be used for marketing, education, interactive exhibits and other non-heritage elements that made the Museum so successful, including the reintroduction of free admission. This success encouraged the Trustees to embark on a series of ambitious expansion projects at both the Cosford and Hendon sites. In the last ten years of his time at the Museum Dr Fopp and his team raised £30M and built “Milestones of Flight”, the Grahame-White factory, watchtower and offices, at Hendon; a new Reserve Collection Store at Stafford; and a Visitor Centre, The Michael Beetham Conservation Centre and the National Cold War exhibition at Cosford. He also founded the country’s only full-blown historic aircraft apprentice scheme and set up an American Foundation to raise funds in the USA.

The RAF certainly appreciated his dedication. “They were very kind to me even before I became Director of the Museum,” says Dr Fopp. “They let me fly the induction sorties on many of their aircraft - this was the orientation flight a new pilot gets on first joining a squadron. I flew in aircraft like the Lightning, Canberra, Tornado, Tucano, … the actual control of the aeroplane I found relatively simple, but the mental acuity needed to keep ahead of it was beyond me. Those sorties left me with an impression of professionalism in flying that not many GA pilots get, which is why I decided on a CPL/IR.”

During a break in work at Oshkosh in 1990 (where he’d been sent under Jaguar Cars’ sponsorship to convince American buyers that cars built in factories that had made Spitfires had to be quality products) he had his head turned by a Lancair, and he came home and told his wife Rosemary - also a pilot - that he’d met the aircraft of his dreams. He spent the next seven years building his Lancair the Fopp way - night classes in DC electronics gave him the sort of in-depth understanding he needed, he made five sets of nose gear doors before he was satisfied enough to put one on the aeroplane, and he did everything except paint it. “I swore I would stick faithfully to the plans, then of course I made lots of modifications,” he says. “I put a completely new tail on it because, halfway through the project, the CAA said the tail was too short in span and there was insufficient longitudinal stability (they were right). Before the factory responded I built a bigger tail out of carbon fibre to keep the weight the same. I spent 550 hours making a second set of wingtips which give me a 10 knot increase in cruise speed for the same fuel burn at altitude; I made the second stick removable for in-flight comfort, and I put in long-range tanks.”

Dr Fopp is a member of the Air Squadron and has participated in a number of their ambitious expeditions. He has also been fortunate to fly a large number of interesting and historic aircraft around the World, including flying a homebuilt Glasair from coast-to-coast across the USA in a couple of days. The Lancair has taken Rosemary and Michael to many far-flung corners of Europe, but he is currently ‘between medicals’, having suffered mild heart attacks last year, the result of an unfeasibly heavy workload. Mindful of the stresses of a year as Master of the Guild, he has retired from the RAF Museum and is close to regaining his medical, having decided to fly to as many Guild events during the year as possible. He remains a Senior Advisor to the Museum and is heavily involved in the proposal to raise £85M to erect a ‘The Battle of Britain Beacon’ in London - a project which, given Dr Fopp’s involvement, seems unlikely to fail.

He is honoured, he says, at finding himself Master. “It’s a great privilege, when one considers the personalities who have gone before. Nobody was more surprised than I was when I was elected to the Court.” Characteristically, he has prepared meticulously for his year as Master, taking soundings, listening to suggestions and looking for consensus. “I’ve spent the last couple of months talking to everybody involved to find out the issues they think are important to GA,” he says. “My list is likely to include disproportionate regulation to small operators and airfields; the proposed Ofcom charges on VHF use, lack of consultation before legislation - the laser light legislation that came out recently is a case in point. It is now a specific offence to shine laser light at an aircraft, but it’s punishable only by a fine when before it was classed as endangering an aircraft and you could go to prison. That’s a retrograde step. The risk of maintenance and training ‘tourism’ because the CAA, uniquely in Europe, is obliged to surcharge in order to return 6% on capital. If costs in the UK are significantly above those of other countries, then maintenance and training will move abroad. The other issue is VAT on training. The fact that you can get VAT relief on air transport management degree courses but not on an Air Transport Pilot’s Licence seems to be totally unfair.”

All these issues will be pressed with determination and diplomatic skill. “I’ve made a few people unhappy over the years because I fought to preserve the RAF Museum against everything from threats of closure to poor funding,” says Dr Fopp, “but worthwhile results were achieved, and I hope I can say the same for the Guild at the end of the coming year.”
Dorothy first flew in a Bristol Freighter, aged 8 when her family flew from Southend to Le Touquet at the start of a holiday to Spain. She was captivated, but it was a long time before she would have the opportunity to fly herself. After studying languages at school, Dorothy took a degree in Law at Southampton University and followed her father and grandfather into the legal profession qualifying as a commercial solicitor in 1982. She had an early passion for skiing and took up long-distance cycling to improve her fitness, undertaking many gruelling long distance trips for charity.

Whilst skiing in Switzerland aged 30, she met someone who talked to her about flying. A long-buried desire to get airborne surfaced and she then determined to activate this interest. The following year she bought herself a hot air balloon flight as part of an adventure weekend and thus set the dream in motion! Her first flying lesson followed two months later and then her PPL - which was not easy - her instructors were not encouraging and it took some perseverance to achieve the licence. The same year she cycled Lands End to John O’Groats to raise money for a children’s charity.

All of the other ratings followed quickly and because she had experienced such a bad time in her training she also developed a desire to become a flying instructor. She had long held the ambition of joining a Livery Company and having left the law to train for a CPL and FI rating, she then met Clive Elton who was flying his Tiger Moth at Redhill. She did not need much persuasion when he suggested that she join the Guild, but she had to wait until she had held her licence for the requisite 5 years!

As soon as she was admitted to the Guild, Dorothy threw herself into the activities, attending as many events as she could. She went back into law after a couple of years instructing, requalifying as an aviation lawyer dealing with aircraft accidents and insurance claims. It was during this time that she first joined the Education and Training Committee, of which she is now the Chairman. She also helped to pioneer the establishment of the Instructor subcommittee and the (now biennial) Senior Instructors Forum held in conjunction with RAF Cranwell and Central Flying School.

The draw to fly pulled Dorothy to a point where she decided to relinquish five days law and only two days left to fly and reversed this to five days flying and two days consultancy! In 2000 she qualified to train instructors and has run FI courses for the past 10 years training over 200 flying instructors for their various ratings. She gained her ATPL (A) and became an FIE in 2001. She also qualified as a helicopter instructor after gaining her CPL (H) in 2005. She currently has over 8000 hours on more than 80 types of aircraft, fixed wing, rotary, piston, jet, glider and microlight.

Dorothy joined the Court as an Assistant in 2001 and has been re-elected twice. She also serves on the Scholarships selection committee and the Trophies and Awards Committee where her wealth of general aviation knowledge is much valued. Additionally, she somehow finds time to edit and author a large number of training manuals and to chair the Professional Flying Instructor Association (another initiative which came out of the instructor forum). Add to that her involvement with BWPA, WAI and the 99s (she is Governor of the British Section) and you realise that her whole life is dedicated to aviation!
The Guild’s 81st year, which is also the year marking the 70th anniversary of the Battle of Britain, sees the new Master, Doctor Michael Fopp, taking over from Rear Admiral Colin Cooke-Priest, who becomes the Immediate Past Master. Most appropriately for this year, the new Master is the son of a Battle of Britain fighter pilot and until very recently was Director General of the RAF Museum. Warden Captain Wally Epton becomes Master Elect and Assistant Dorothy Pooley is the newly elected Warden. The transition from old Court to new took place on 17th March, with the Master, Master Elect, Immediate Past Master, Wardens, Learned Clerk and Chaplain processing the short distance from Merchant Taylors’ Hall across Cornhill to St Michael’s Church for the Annual Guild Service. Here around a hundred Guild members and their guests had assembled and the Guild’s Honorary Chaplain, Liveryman the Reverend Dr Peter Mullen, conducted the Service in his uniquely inimitable style. In a typically robust and challenging sermon he berated the current powers-that-be in the Church of England for their puerile advice to church-goers on how to deepen their spiritual awareness in the season of Lent. He ridiculed their involvement with such publicity seeking issues as the blessing of electronic gadgets, the production of cartoon style politically correct booklets offering behavioural guidance for Lent, carbon fasting and the pagan superstition of global warming. “The Church should be the antidote to all this guff, gimmicks, publicity-mongering”, he said, “Instead we see a Church empty of intelligence and inspiration - delighted to copy the worst popular fads promoted by the mass media.” His advice to the congregation was to take a dose of the faith neat, like a glass of whisky, to carve out five minutes anytime in the day to be quiet and give thanks for one’s life, to read a psalm or a chapter of the Gospel each day between now and Easter. Afterwards in Merchant Taylors’ Hall, non-members listened to a talk entitled “Reflections and Anecdotes on Making the Five Part TV Series Monarchy - the Royal Family at Work”, by Robert Hardman, author and broadcaster, whilst Guild members assembled in the Parlour for the Annual General Meeting and swearing-in of the new Court. The Master’s Annual Report, previously distributed with February Guild News and available on the Guild website, recorded another very successful year for the Guild, which he hoped would be marked as a year of consolidation. The Report focused on all areas of the Guild’s activities, ranging from the Regions, the work of the Committees, the Benevolent Fund, Guild Visits, Promotional Activities, Social, Aviating and Sporting Activities and the Guild Young Members. He concluded his Report with a special word of thanks to the Guild’s office team for the immense amount of work they did behind the scenes with a minimum of fuss and a ready smile, and thanked them personally for the support given to him during his year as Master.

The Guild’s Treasurer, Liveryman Robin Pick, reported that the Guild had had another good year up to 30th September 2009 although the surplus had been reduced by 33%. Fees and quarterage received reflected a growth in membership. Income from Livery Fines has reduced and investment income declined by 18% but surpluses on sales of investments increased. Recent repayment of debt by the Guild of Air Pilots Trust had enabled the purchase of further investments which would have an impact on income for the future. Donations received increased substantially and were earmarked for specific projects. Income from the Gladys Cobham Trust, remained the same as in previous years.

The value of the Guild’s investments at the year end revealed an increase of approximately 10% compared with original cost. He said that expenditure had increased by 16%, excluding special projects, and in view of the reduced surplus would be monitored carefully. He noted that the surplus recorded by the Air Safety Trust had reduced by 33% but the Guild of Air Pilots Trust surplus had increased by 32%. The value of the investments held by both Trusts had increased by a small percentage when compared with original cost. The net assets of both Trusts had also increased. Copies of the accounts of both Trusts were available at the Guild’s offices for any member who wanted one. The audited accounts of the...
Guild had been approved by the General Purposes and Finance Committee and the Court, and had been circulated to members in February Guild News. He concluded by observing that the Guild was unlikely to escape the effect of the general economic recession and both income and expenditure would be carefully monitored.

The results of the Court elections were announced; Captain John Robinson was re-elected and Lieutenant Colonel Kent Johnson and Captain Dacre Watson were elected as new Assistants. The new Court was sworn in, the appointments of the Guild Officers were confirmed and the new Master, Dr Michael Fopp, was installed.

After the Annual General Meeting the new Master and the Master’s Lady greeted members at a champagne reception which was followed by the AGM supper. The Reverend Dr Peter Mullen said Grace, a special composition for the occasion:

*O Lord consider Michael Fopp*
Ten years he was a very fair cop
*For twenty two he ran the RAF Museum*
Such dedication deserves a Te Deum
*God bless him in his Master’s task*
May our victuals be tasty
*That all we ask*

In his inaugural speech at the AGM supper, the Master paid tribute to the new Warden for her perseverance in her quest to become Master, and to the many other Past Masters for their invaluable help, advice and good counsel to him on his journey to Master. He singled out in particular the Immediate Past Master and his Lady for the way in which they had led the Guild in the past year with style and grace - a hard act to follow. He hoped that, in general, there would be little change in the way the Guild was run over the next year, remarking that if something is not broken, it didn’t need to be fixed. He intended to use his lifelong study of aviation history to illuminate the folly of proposals through the historian’s innate capacity for perfect vision of the past; he believed also that the patience he had learned over many years of working with horses would give him the ability to listen intelligently to regulators, bureaucrats and politicians. As a son of an Australian members of the Few and a historian of the period, he looked forward to delivering the Cobham lecture on the Battle of Britain in its 70th Anniversary year. Specifically, he planned to use his aviation talents to promote the grass roots of aviation, the General Aviation movement, where he believed there was an untapped and rich seam of potential Guild members in this country and the regions. He would be spreading the word during his tour and would also be addressing a very large audience at the EAA Convention in Oshkosh in July. As a member of a number of aviation related organisations he felt that only the Guild brought together all interested parties, through the medium of its specialist Committees, to discuss a subject. The Guild was, in his opinion, the glue that binds the underpinning of good sense and reason which ultimately filters to sensible practical, proportionate and fair regulation. He hoped that during his year he could get that message across because he thought it was fundamental to not only the Guild’s success but also “to the continued viability of aviation as we know it.” After announcing that his selected Charity for his year was the Great Ormond Street Children’s Hospital, he invited everyone to join him in the toast, “The Guild of Air Pilots and Air Navigators, may it flourish root and branch under my stewardship during the coming year.”

Photographs taken at the AGM reception and supper can be viewed and ordered online direct from Gerald Sharp Photography at www.sharpphoto.co.uk

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*The senior Court members, 2010. From left, Paul Tacon (Learned Clerk), Air Marshal Cliff Spink (Warden), Rear Admiral Colin Cooke-Priest (Immediate Past Master), Dr Michael Fopp (Master), Captain Wally Epton (Master Elect), Judge Tudor Owen (Warden), Mrs Dorothy Pooley (New Warden) and Mr Ted Prior (Beadle)“Over to you!” Sue Cooke-Priest passes on the Guild Lady’s Brooch to Rosemary Fopp*
GRAND MASTER
HRH The Prince Andrew
Duke of York KG KCVO

MASTER
Dr M A Fopp MA FMA FRaE

IMMEDIATE PAST MASTER
Rear Admiral C H D Cooke-Priest CB CVO FRaE

MASTER ELECT
Captain O W Epton FRaE

WARDENS
Air Marshal C R Spink CB CBE FCIM FRaE
His Honour Judge T W Owen FRaE
Mrs D J Pooley LLB (Hons) FRaE

ASSISTANTS
Squadron Leaader C J Ford RAF
Captain D A J Martin FRaE
Mrs P A Nelmes BA (Hons) FRGS
Captain K Warburton FRaE
Captain R O Whitefield
Captain P Q Benn
Captain A J Boyce JP BAv MBS (Hons) FRaE AFRIN
Captain C A Cox
Group Captain T Eeles BA FRaE
Professor D M Green CBE BScEcon PhD econ FRSA
G C Hackemer Esq BSc ARAeS
Lieutenant Colonel Kent Johnson MA Sc MEd BSc FRaE
Captain J B Robinson AFC* FRaE
Captain Dacre Watson FRaE

CLERK
P J Tacon Esq BA FCIS

ACKNOWLEDGED BY THE COURT 11 March 2010

REGRADE
To Livery
John James ROMAIN
Group Captain Simon BRAILSFORD
Captain Brent Raymond HAWKINS
Timothy George Alexander PRINCE

DECEASED
Peter James Martineau CUMMING-LATTEY
Alan DUCKWORTH
George Colin HARRISON
John Eric WILLETT

RESIGNATIONS
Alan Victor CHERRY
Sean Lee ELLIS
William Hector HOWELL (NZ)
David Gordon JURGENS (OS)
Wendy MANN (AUS)
Bryan Leslie STOTT (AUS)
Graham Edward THOMAS
Gordon THOMPSON (NZ)
EDUCATION AND TRAINING COMMITTEE REPORT JANUARY 2010
WARDEN DOROTHY POOLEY

At the meeting held on 1st December, there was no cameo and the usual agenda items were covered fairly swiftly. A report of the Scholarships Wash Up meeting was received and it was noted that this had been the most trouble-free season for instruction that could be remembered!

Some discussion focussed on the recent NATMAC consultation paper concerning the proposal to decommission a large number of the VORs and en-route NDBs in the UK. Our representative had argued for a full review of the safety implications for many GA aircraft as this action would cause major implications in the area of airspace infringements. The removal of the ground-based navigation aids needs to be done in concert with a more liberal approach to the use of space-based GPS systems and pressure is needed to encourage the CAA to authorise the use of these for VFR navigation.

Although not an agenda item, following the Chairman’s suggestion that the committee should work on another position paper, a lively discussion centred on the area of Training Standards. This item had been highlighted in the original list of ten “issues” for the Strategic Review and the topic encompassing glass cockpits, “quality must come before quantity”, MPL etc. fired the imagination of members. The discussion encompassed the shortcomings of the ATPL examinations, the pros and cons of modular v integrated v MPL and a number of other pertinent topics. It was agreed that a Working group would be formed to set out the scope of subjects to include in a potential position paper and would report back to the committee with its objectives. The work will mainly be conducted electronically as before. Tentative requests for volunteers to form the Working Group met with a veritable battalion of offers, so although no timetable for the paper has yet been set, it was generally felt that this initiative was timely and appropriate in the current climate.
Having flown around the world with the Royal Navy and commercially in the North Sea, Africa, India and Australasia, one aviation ambition had continued to elude me during a 40 year career as a helicopter pilot.

When asked by Heli Solutions of Melbourne to fly one of the two helicopters aboard the icebreaker L’Astrolabe on a trip to the Antarctic, I didn’t need to be asked twice!

And so it was that, last October, I found myself at Hobart Docks, Tasmania, with fellow pilot Marty Hanna and engineer Peter Hearne as the two AS350B2 Squirrel helicopters were loaded into the hold of the research vessel with the only inches of clearance - the start of our four week voyage.

I should have realised that the small matter of the 65 metre ship rolling even while tied up alongside didn’t bode well for a comfortable trip, but we were to find out soon enough. I’m sure the L’Astrolabe would roll on wet grass!

The MV L’Astrolabe is used by L’Institute Paul Emile Victor to support the French base at Dumont D’Urville, and the first trip of the (southern hemisphere) summer season carries two helicopters to transfer personnel and freight from the edge of the fast ice to the base, and to support the Glacial and Geological research.

The weather and substantial pack ice meant our trip down to 66 South took a very long eight days, with plenty of pitching and rolling along the way - friction burns from sliding across the bed sheets was a new, and eminently forgettable, experience!

Once in the pack ice, most of the motion was replaced by the crashing of the ice as we cut our way through, and the ship’s mess began to fill for meals with people we didn’t even know were on board!

Passing through the ice was fascinating - the ship creates splits up to 500 metres ahead of its position, the increasing numbers of penguins watch and debate whether we’re a threat or not, and first-timers (like me) spend ages looking at the deep, deep blue of the glacial ice as we pass thickening sections and icebergs. One of the Frenchmen who spent nearly all day outside was dressed warmly in his parka, beanie, etc but had only bedroom slippers on his feet in -14C!

The thicker than normal ice meant the closest we could get to Dumont D’Urville (DDU) was 59nm, so we were committed to flying more than double the expected 15-20nm and significantly more flying hours than originally scheduled. No complaints from me!

The helicopters were craned out of the hold once the ship was parked against the ice, and when ready to fly we found a significant problem: freezing of the cable from the fuel control lever to the engine fuel control was to haunt us throughout the trip. Both aircraft suffered fuel control lever failures, mine on the first day and the other (flown by Marty Hanna) on the very last flight on the last day, but engineer Peter Hearne was an absolute gem and fixed both.

My initial impressions flying over the fast ice to DDU were the vast distances and the variations of blue in the ice. It was quite easy to see a 200 foot high iceberg near to the ship when climbing to 1000ft on departure from DDU 50+ miles away, and also the Mertz Glacier another 50 nm beyond the ship.

Of course one of the important personal tasks on my first landing on the Antarctic Continent was a photo or two, and the Guild News was prominent in that first photo.

The icebergs, stuck fast in the ice, are all shapes and sizes as they disappear off to the horizon in the north. Some are frozen as they start to capsize, and show enormous scrapes of dirt and debris from the ocean floor, many are 2-300 feet high and hundreds of metres long, and all have variations of blue ranging from pale robin’s egg through to deep indigo.

Coming to terms with the scale of distance and what you can see are challenging while flying, and the lack of definition was accentuated by my flying helmet visor, which made the blue more noticeable. Quite how early aviators managed without modern GPS units impressed me as I flew along watching the magnetic compass steadily revolve all the way around: no help whatsoever, and our local variation was 165 degrees!
The French have been monitoring the Mertz for monitoring equipment on the glacier. The glaciologist to Mertz Glacier and work with monitoring equipment on the glacier. The French have been monitoring the Mertz for some 30 years, and the glacier has a crack along the coastal area which is expected to break through very soon allowing 100 years of glacial ice to come free and drift off into the ocean. Over 50 kilometres long, it will be a natural event but one that hasn’t been seen and monitored to such a degree.

A problem with the ship last year prevented flying to the Mertz so we had 6 locations to search for GPS tracking stations that hadn’t been checked for 2 years. They are about 2.3 metres above the surface when new, and the only one we found had just 25 centimetres remaining above the glacier. New snow and ice accumulates at a rate of more than a metre a year so even the fuel drums we left overnight at our refuel point had snow drift burying the netting and drums.

We flew glaciologists and equipment to build another 4 GPS stations, staged either side of the crack so that both the drift of the glacier and the movement of the crack can be monitored along with weather conditions.

My fuel control cable was freezing below -16°C so I couldn’t risk shutting down, but Marty and the others were surrounded by intense silence whenever I left them to go on another task. Nothing but miles of ice, and no obstructions to create noise from the constant katabatic wind: bliss, if it weren’t for -20°C! We also carried out important research which concluded that Tim Tam biscuits left on the ice are much nicer than Mint Slices, although they both revert to soft chocolate after only 20 minutes in a heated helicopter cabin.

The geologists needed to visit Penguin Point, a location on the east side of the Mertz on the edge of the Antarctic mainland. On the first flight we discovered an old igloo shaped hut, recently uncovered after being buried for what we thought was 50 years or so. Only the frame remained plus a host of artefacts on the floor, including skins, poles, a stove, kettle and a bucket.

The geologists also were landed at Correl, a solitary rock formation sticking out of the ice on the west side of the Mertz which has been identified as having identical rock types as are found in South Australia. One of their previous finds is currently in the Louvre Museum, so it is a significant area. Mind you, landing there with the wind whipping around the rocks was fun, especially as there was only one location that would just take a Squirrel helicopter!

Throughout the first week the ship was constantly stuck in the ice, with little sign of breaking free, so our flight time to the Mertz was long enough to impact on the time available for the work to be done on the ice. The ship finally broke free on the second day that we were on the Glacier, and when attempting to move closer to the Mertz we had a day of high drama with 68 knot winds, freezing ocean spray, and an exciting few hours securing the helicopter blades which were doing their best to leave the aircraft and the ship!

After the ship moved to a more sheltered spot we had to remove frozen salt water from the helicopters with fresh warm water, then remove the fresh water ice. We finally got airborne that day at 8 pm, but the long daylight gave us a few hours to get some work done.

After a last day of support flying to the Mertz Glacier, L’Astrolabe was scheduled to depart for Hobart, but when Marty went to start to return from DDU the frozen fuel control cable caught him and prevented a start. Fortunately Peter was along for the ride, and spent most of the night working on the Squirrel outside in temperatures down to -30°C. On their way back to L’Astrolabe early the next morning they passed over Mawson’s Hut, which is now buried to the roof having been cleared only a few years ago.

With both helicopters on board and secure we started north, stopping in the lee of a large ‘berg to remove the main rotor blades. Soon after we passed, a massive iceberg that had broken away from the Ross Shelf and was drifting North was our last reminder of the sheer magnificence of the Antarctic.

Once through the ice pack, the helicopters were again manoeuvred into the hold, and we set off - into a Force 10 storm! Discretion gave us a small respite as we headed around the eye of the storm toward New Zealand, but I must remember to avoid small ships in future. Nothing less than 20,000 tonnes may give the stability needed for a comfortable voyage!

The Antarctic is stunningly beautiful and impressive; full of unique sights. We were lucky to see a lot of the native wildlife from the little Adelie penguins, the large imposing Emperor penguins, seals, sea birds and Orca whales - all quite fearless in their inquisitive approach to the ship and to us humans as we visited their environment. Seeing the icebergs and glaciers was truly amazing, an experience of a lifetime. I feel so lucky to have ticked yet another box in my aviation “to-do” list!
When Joseph-Armand Bombardier invented his first snowmobile early in the 20th century and started his company, he had little idea that his ingenuity and tenacity would go beyond the Ski-Doo and Sea-Doo to the global transportation giant Bombardier is today. In 2010, Bombardier is well established globally in both the aerospace and rail transportation business segments. Bombardier Transportation leads the world’s rail equipment manufacturing and servicing industry with a wide range of products which include locomotives, passenger rail vehicles, very high speed trains and total transit and security systems. Many major cities use or are linked by Bombardier rail systems. In fact, every three seconds, every day, a Bombardier aircraft takes off or lands somewhere in the world.

Headquartered in Montréal, Québec, Canada, Bombardier operates in more than 60 countries on five continents. Its 66,900 employees, roughly equally split between Aerospace and Transportation, adhere to a “Game Changing” ethos in which engineering ingenuity and sustainable solutions play seminal roles. Its shares (BBD) are traded on the Toronto Stock Exchange. In the fiscal year ending January 31, 2009, Bombardier posted revenues of $19.7 billion US. More than 96% of this revenue comes from outside Canada.

A Wide Spectrum of Bombardier Fleets
Bombardier Aerospace enjoys significant market share with its high-performance aircraft and services in six segments:

- Business aircraft - Learjet, Challenger and Global aircraft families.
- Commercial aircraft - the new CSeries, CRJ Series and Q-Series aircraft families.
- Amphibious aircraft - Bombardier 415 and Bombardier 415 MP aircraft.
- Jet travel solutions - Flexjet fractional ownership and Skyjet charter services.
- Specialized aircraft - Bombardier aircraft modified for special missions.
- Aircraft Services and Training - aircraft parts, maintenance, comprehensive training, technical support and publications, and online services.

Ingenuity
In addition to having developed aircraft programs since 1989, Bombardier has created game-changing, world-firsts in aviation:

- E-Brakes - a Bombardier and civil aviation first with an all-electric braking system.
- Learjet 85 - an all-composite business jet.
- CSeries - the greenest single-aisle aircraft in its class, offering unmatched passenger comfort, performance, operating economics and the latest technological advancements.
- Q400 Next Gen - state-of-the-art turboprop offering exceptional economics while being comfortably greener.
- CRJ 1000 - the next major step in the evolution of the CRJ Series aircraft family, the world’s most successful family of regional aircraft.

Game Changing Aircraft
Launched in 2008, the CSeries (CS100 and CS300 variants) family of aircraft program is on track for a 2013 Entry into service (EIS) date. It will be the greenest single-aisle aircraft in its class with emission reductions of 20% for CO2 and 50% for NOx. It promises to deliver dramatic energy savings, a 20% lower fuel burn advantage and a 15% improvement in cash operating costs and will be four times quieter than any aircraft in its class. A dramatically quiet footprint means fuel savings through not having to circumvent sensitive noise abatement areas and flying more directly to airports. Its ability to operate from challenging airfields will facilitate a much larger selection of airports around the world than any aircraft in its class. The CSeries aircraft is comprised of 70% advanced structural materials including advanced composite and aluminum lithium for significant weight savings. The CSeries aircraft is designed to have a 99% reliability rate “out-of-the-box” at EIS.

Set to revolutionize the industry, the Learjet 85 business jet is Bombardier’s first all-composite aircraft for type certification under Federal Aviation Regulations, Part 25. In addition to improving performance and minimizing drag through smoother
aerodynamics, the all-composite airframe offers exceptional strength-to-weight ratio, reduced maintenance and extended service life. The structure will increase passenger comfort by allowing for the use of complex curves in the aircraft cross-section, thinner wall thickness to maximize cabin volume and optimized placement of windows and other cut-outs. It is the largest Learjet aircraft ever designed with a range of up to 3000 nm and maximum cruise speed of up to M0.82. The impressive flight deck features the new Rockwell-Collins Pro Line Fusion avionics suite, including a synthetic vision module. On track in its development, its entry into service date is set for 2013.

**Specialized Aircraft Solutions**

The high performance, operating economies and reliability designed into all Bombardier aircraft families make for excellent platforms for demanding government purposes. Today, more than 340 Learjet, Dash 8 Q-Series, Challenger and Global aircraft serve more than 40 governments around the world. Of note, 150 CL-215, CL-215T, Bombardier 415 and Bombardier 415 MP aircraft, the world’s most productive purpose-built fire-fighting aircraft, operate in 10 countries.

Some of the missions these specialized platforms perform include Intelligence, Surveillance and Reconnaissance (ISR); Maritime Patrol (MP); Search and Rescue (SAR); communications; medevac; flight inspection; heads of state transport; freight movement; research & development; training & training support; and, special classified operations.

The Royal Air Force Advanced Stand-Off Radar (ASTOR) Sentinel fleet is a good example of what the Bombardier Global Express platform can do for the ISR mission. With a cruise altitude of 51,000 ft amsl, speed of M0.89 and more than a 6,000 nm range, the Global Express aircraft answers the call for speed, reach and persistence. This remarkably reliable, high performance platform is attracting the attention of other governments for specialized missions. The high performance Bombardier Q400 NextGen aircraft offers advanced technologies, speed, impressive fuel efficiency, size and is also showing great promise for a variety of specialized government roles.

**The Way Forward**

Imbued with a strong sense of Corporate Social Responsibility, Bombardier became a signatory to the United Nations Global Compact in 2007; has been an Index Component of two Dow Jones Sustainability Indexes since 2007; and, was recognized as one of the ten Canadian Climate Disclosure Leaders in its category in the Carbon Disclosure Project 2009.

Bombardier’s Way Forward embodies customer focus, ingenuity, very high quality and situational awareness of the world in which it operates. Suffice to say, Bombardier Aerospace and Transportation will continue to strive for “game changing solutions” in broad and tough global markets. Watch this space.

*Bombardier 415, Bombardier 415 MP, CL-215, CL-215T, CSeries, CRJ, CRJ1000, NextGen, Q400, Q-Series, Dash 8, EBrakes, Learjet, Learjet 85, Challenger, Global Express, Flexjet, Skyjet, are trademarks of Bombardier Inc. or its subsidiaries.*
Since the mid 20th century, when commercial aviation first began to spread from Europe to the Far East, Bahrain has been the preferred staging post for international flights from London and Paris to Singapore and Hong Kong. Before the modern Bahrain Airport was built at Muharraq, a concrete landing strip in the desert, located in the valley between the Royal palace at Riffa and the pioneering oil town of Awali, received international airliners as they set down to refuel then take off again on their long trip halfway around the world. Then the limelight transferred to the flying boats and Bahrain was to see the start of a regular service by Imperial Airways’ famous Short’s Empire class. In 1950, at the then new airport in Muharraq, the milestone for Bahrain was the launch of a new local airline - the Gulf Aviation Company, the forerunner of Gulf Air as it is today. The 1950s saw the launch of BOAC’s (now BA) service to Singapore, Hong Kong and Sidney from Bahrain. The arrival in 1976 of BA’s Concorde supersonic service from London via Bahrain to Singapore established Bahrain’s place in aviation history. The vision of the first ever International Air Show in Bahrain was the inspiration in 2004 of His Majesty the King of Bahrain, King Hamad bin Isa Al Khalifa. The concept theme was to make this Air Show unique and to be set apart from other Air Shows world wide. His Majesty, being a pilot himself, took this vision very much to heart.

Six years of intensive planning and preparation, including the construction of a brand new airfield deep in the heart of the desert close to the International Grand Prix Racing Circuit, were needed in order to transform His Majesty’s vision into reality which unfolded at Sakhir on 21st January 2010, the 60th anniversary of the formation of Gulf Air. The planning team was led by His Excellency the Undersecretary of Civil Aviation Affairs, Captain Abdulrahman Al Gaoud. Financial planning was in the hands of Talal Alzain of the Bahrain Mumtalakat Holding Co. Professional expertise in the planning of this type of Air Show was provided by Farnborough International UK. Finally, 40 luxury five-star chalets were constructed to host commercial airlines and aviation equipment companies, in order to entertain guests and transact business throughout the course of the Air Show.

The 3 day Air Show began with an impressive opening ceremony, led by His Majesty King Hamad of Bahrain accompanied by his principal guest, King Abdullah of Jordan. The opening day was a day of brilliant sunshine and perfect flying conditions. The 40 chalets were hosted to every major aviation company in the business. The trade tickets were sold out, as were the public tickets. The event was a resounding success with an attendance of over 40,000. Representatives were present from Asia, the Arab League, Europe, Russia, the US and the UK. The Bahrain Police Band, in their brightly coloured military uniforms, played throughout the day. There were 74 aircraft on static display, including the first public showing of BAE’s range of UAVs. Each day there was a thrilling and dramatic flying display put on by international military aerobatic teams, as well as controlled parachute drops. There was also a low level fly-past by an Airbus A340 of Gulf Air and an Airbus A320 of Bahrain Air, symbolising the major importance of commercial aviation in the economies of Bahrain and the Gulf. Two of the star attractions which thrilled the public were the Saudi Hawk aerobatic team and the French Patrouille de France in their red, white and blue Alphajet aircraft, led for the first time by a lady pilot, Major Virginie Guyot.

It is planned to stage the Bahrain International Air Show in January every second year. There is little doubt that the event will supply a powerful stimulus to the economy of Bahrain and to the vitality of commercial aviation throughout the Gulf and Middle East. The 3 day Air Show was a resounding success, enjoyed by everyone and must have seemed like a dream come true to His Majesty’s original vision. Perhaps in 2012 the Bahrain International Air Show will see a fly-past by the Airbus A380 and the Boeing 787 Dreamliner.
Last summer my regular flying partner and fellow Freeman, Amanda Harrison, and I decided to enter the Dawn to Dusk flying contest again. This would be my third attempt and Amanda’s second, and each time we’d entered we had been placed third in the world... Would 2009 be our year?

The rules of the contest call for competitors to pick a theme and then do as much flying, in accordance with that theme, between 04.30 and 21.30 on a single day... and we knew exactly what our 2009 theme would be!

October 2009 marked the 100th anniversary of Britain’s first airshow, and I had already researched the subject in depth for an upcoming book project - so we chose to visit as many current and former airshow venues as possible. Both of us had visited airshows since early age and they undoubtedly had a profound impact on our aviation careers. We also chose to use the flight to publicise the great work done by Mandy Pantall’s Fly2Help charity.

This year we were lucky to secure the support and sponsorship of TakeFlight Aviation at Wellesbourne Mountford, who kindly provided one of their pristine PA-28s for the flight. TakeFlight is a novel concept among flying clubs and actually has more in common with an aircraft syndicate or fractional ownership scheme. There’s no minimum hours requirement, which means you can hire aircraft for a day or a weekend, but only pay for the time the aircraft is in use. It’s like having your own aircraft to use as you wish, but at the fraction of the cost of ownership! We are also grateful to Airbox who provided one of their new Airbox Foresight GPS units which would prove invaluable as we traversed the UK’s airspace.

Long & Convoluted

A long and convoluted planning process was not helped by the fact that Amanda lives in Oxford and I now live in Nottingham - meaning we rarely get chance to sit down and study the same map! Nevertheless we narrowed the list down to 30 airfields and set about developing the most efficient route around them. All landings would be ‘touch and go’ unless we required fuel or were scheduled to meet the press to promote the charity. We also factored 10 minutes in to every leg to cover the approach, landing (or touch and go), take-off and climb out. Where refuelling or press conference stops were scheduled we allowed ourselves 30 minutes on the ground.

Official dawn on our chosen date (August 14) was 05.37 but CAA rules meant we could depart 30 minutes prior to that time. Dusk was 20.32 - meaning we’d need to be on the ground no later than 21.02.

August 14, 2009 - 4.15am

The planning process was long and fascinating, but with limited space in this article I expect you’ll find the flying far more of interest! We were at Wellesbourne Mountford by 04.15 and checked in with our Operations team. John Baker had positioned himself at the Flightworx offices at Earls Colne and was joined by Adrian Kinsley. Guy Stockley was on detachment to Afghanistan but determined to be part of the adventure and monitored the internet for the latest Met and NOTAMs - this was a truly international effort!

There wasn’t a breath of wind at Wellesbourne Mountford as we clambered into our lifejackets (is there a more undignified article of clothing known to mankind?). G-BYSP’s engine fired into life at 05.06 and we were airborne at 05.15.

Northbound

It was still dark as we headed 307˚ under the control of Birmingham APP. Our first stop was Halfpenny Green, where we’d been granted ‘out of hours’ indemnity to do a touch and go. We climbed away at 05.36 en route to the Isle of Man. At 05.41 we overflew RAF Cosford (another airshow venue) and snapped a photo for the judges.

Routing up the Low Level Corridor towards Blackpool we passed the small town of Winsford at 06.01 and routed directly overhead Amanda’s old school! We then passed Warton and turned overhead Blackpool and coasted out over the Irish Sea towards the Isle of Man.

Mid way across the water the clouds finally began to lift and we were able to climb slightly and breathe a sigh of relief. We never made it to more than 2,000ft but every extra foot counted and carried us further from the waves.

Our routing across the sea had been very specific as we had wanted to recreate the route flown by the Manx Air Derby in the 1930s. Aircraft raced from the south of England, turning overhead Blackpool and coasting in at Maughold Lighthouse (as per our route).

Upon landing at Ronaldsway at 07.06 we were greeted by TV cameras and a sea of
officials in hi-viz jackets. The first to greet us was a representative of ‘Special Branch’ and we immediately expected to be quizzed about our Flight Plan, customs forms and passport details - however we were far from the truth. This policeman was an aviation enthusiast who wanted to be the first to welcome us to his island!

The next 15 minutes were a blur of interviews and posing with the BBC Isle of Man TV taking up the bulk of our time.

Whilst G-BYSP was fuelled we were whisked off in a police car (with blue lights and sirens!) to the nearest bathrooms for a comfort break! We enjoyed our few minutes on the island, and intend to return to sample the wonderful hospitality again. We accelerated down the runway at exactly 08.00 and pulled up into a gentle climb whilst rocking the wings to wave goodbye to the TV crew.

From here on our route took us eastwards to perform a touch and go at Blackpool (08.31) and onwards to Doncaster - where we landed 11 minutes ahead of schedule at 09.14. More TV crews and press were waiting for us at Doncaster and I jumped at the opportunity to show a pretty young reporter around the aeroplane!

**Escort**

We left Doncaster at 10.03 and headed for Derby (10.30) where we landed, backtracked and departed (rather than doing a touch and go) due to the runway length. From here we headed to Stoke Golding airfield - home of the Stoke Golding Stake Out event each August. “If I had guns you’d be dead now!” called Stoke Golding’s owner, Tim Jinks, as he manoeuvred his Christen Eagle onto our tail.

Tim escorted us into the lovely grass airfield, his gorgeous biplane bobbing around us taking photos and video. We did a touch and go at 11.00 and headed off for a fuel stop at Coventry. We, optimistically, budgeted just 15 minutes on the ground at Coventry but the team did us proud and we were away pretty much on schedule and heading towards Sywell.

The rest of the day was a blur of airfields. From Sywell we routed to Old Warden, Little Gransden then RAF Mildenhall. During the planning stage we held out little hope of actually getting permission to land at Mildenhall, but the RAF Base Commander (Sqn Ldr Rick Fryer) proved to be an absolute star. We had to sign a multitude of paperwork to obtain our Pentagon clearance (I kid you not) but we were eventually got all the ticks in the right boxes.

Flying downwind at Mildenhall, listening to the US drawl of the ‘air trafficker’ clearing an AWACS to land in front of us the realisation of what we were doing finally hit home. Not only is Mildenhall one of the most-missed airshows on the calendar it is a base with significant history. The 1934 England-Australia Air Race began from here and in the ‘80s the legendary SR-71 Blackbird flew sneaky missions over Cold War Russia from this very runway. Now, we were about to turn final and add it to our logbook. We both wore wide grins at that moment.

From Mildenhall we routed to Cambridge and on to Duxford - where we gave 8-year-old airshow fan Ellie Kitney her first flight in a light aeroplane. It cost us an extra 20 minutes but it was worth every second to see her beaming grin.

**Ellie Kitney after her first flight in a light aeroplane**

Leaving Duxford at 13.57 we headed to North Weald, Damyns Hall, Biggin Hill and Farnborough before setting course for Newquay St Mawgan. This would be our longest leg and it was also in ever worsening weather. En route we passed the airshow/fly-in venues at Middle Wallop, Popham and Compton Abbas but by the time we reached Devon the cloud was becoming thicker and lower.

We opted to cancel our planned over-flight at Branscombe and climbed up through the cloud into VMC as we passed Sidmouth, finally breaking clear of cloud as we reached 3,300ft. Luckily Amanda is the proud holder of an Instrument Rating, so I was happy to relinquish control at this point as we prepared to fly an ILS approach into Newquay. Our good friend Neil Harris was working the approach frequency and he soon vectored us onto the beam, but we didn’t break clear of the cloud until around 800ft. Our formation sigh of relief was certainly impressive.

We landed at 17.00 - 10mins early - but the more we looked at the en route weather it appeared that our stay may be a long one. Outside the office window we could see wispy grey clouds swirling below a solid bank of cloud. The bright warm sun we had left at Duxford was nowhere to be seen and the breeze blowing through the window was decidedly chilly. What a difference a few hours and 250 miles makes to the British climate.

Another press conference followed and ‘SP was refuelled for the final time. We finally left at 18.05 and immediately entered cloud as we turned north. The cloud finally cleared as we climbed through 3,800ft and we contacted Cardiff Radar and pressed on north.

**Thank You Cardiff!**

The controller at Cardiff was one of the friendliest we encountered all day. Whenever we have entered the competition we have always been amazed at the level of interest ATC officers show in our flight - no doubt helped by the fact that our Ops Manager John Baker always calls ahead to inform them of what we are doing and when to expect us. We invariably get a cheery welcome and a good luck wish as we sign off frequency, but the Cardiff controller was exceptionally helpful and friendly. (If you were working Cardiff Radar at 18.30 on August 14th I’d like to use this opportunity to say thank you - you helped relieve the stress of an IR trip, reduced our workload significantly and simply made us feel ‘special’).

Our new friend at Cardiff guided us down through the cloud as we approached the Severn Bridge. I got my first glimpse of the Severn Estuary as we passed 1,200ft, its water looked cold and menacing with small white crests on the choppy waves. Below the clouds it was dark and grey but ahead of us I could just make out the unmistakable shape of the bridge. It was 19.05.

We continued to Kemble and landed at 19.20 to be greeted by yet more press along with friends, well-wishers, Fly2Help representatives and sponsors. By now the weather was dull, grey and cold but seeing so many friendly faces lifted our spirits.

Our next stop was due to be RAF Fairford - where the USAF had agreed for us to do a low approach and go around at 20.20. They’d even offered to man the tower especially for us! However, as we orbited South Cerney (yet another airshow venue!) we could not raise Fairford on the radio.

After several attempts Amanda contacted nearby Brize Norton who, to cut a long story short, called Fairford by telephone and cleared us to make our approach! As we passed flew past Fairford’s tower the lights were on and we could see signs of life - but why they wouldn’t speak to us is still a mystery...

Our next point-of-call was due to be the former RAF station at Little Rissington... but the friendly controller at Brize asked if we’d like to add his airfield to our list. Who were we to refuse! We flew down the colossal
runway at 300ft and 100kts and rocked our wings in thanks as we passed the tower. It was now getting dark but we had enough light to make our final touch and go at Little Rissington at 20.35 before climbing away and turning north towards Wellesbourne. We had been due to overfly Upper Heyford but it was now dark and raining so we decided to head home to Wellesbourne instead. We did ‘bag’ a final over-flight (Gaydon at 20.45) en route though - taking our final tally to 30 airfields.

The lights were on by the time we arrived at Wellesbourne and established ourselves on short final. G-BYSP’s tyres squeaked onto the tarmac and Frankie in the tower welcomed us home. It was 20.50... fifteen hours and 35 minutes after we’d set off on our adventure. There was a champagne reception at TakeFlight HQ followed by a photoshoot. We contemplated ‘forty winks’ but the TakeFlight team were having none of it... they whisked off to the pub for food and celebrations until 02.00 the next morning... You can’t take it away from the TakeFlight team - they’re a sociable bunch!

Statistics
For this year’s D2D flight we had set ourselves a self-imposed target of 1000 miles. The following morning, after we had woken up sufficiently to do the sums and complete the tech-log, it became obvious we’d shattered our target. During the course of the day we had flown 1,126 miles (978nm) in 10hrs 35mins. Our total, chock to chock, time was 12hrs 20mins and we visited 21 current or former airshow venues and overflew/photographed a further nine. More importantly we had conducted countless interviews for Fly2Help and helped promote the amazing work it does with disadvantaged youngsters around the UK.

Was it third time lucky...? The results were announced at a special dinner at the RAF Club in Piccadilly, London on January 20 and 'Team TakeFlight Airshow Challenge' came fourth in the world. We beat teams from the UK, Norway and Australia and also retained the Pooley Sword for the best written log. Now we set our sights on the 2010 competition... maybe it’ll be fourth time lucky? 

The Route
Wellesbourne
Halfpenny Green
Cosford (Overflight)
Warton (Overflight)
Isle of Man
Blackpool
Doncaster
Derby
Stoke Golding
Coventry
Sywell
Old Warden
Little Gransden
RAF Mildenhall
Cambridge
Duxford
North Weald
Damyns Hall
Biggin Hill
Farnborough
Popham (Overflight)
Middle Wallop (Overflight)
Compton Abbas (Overflight)
Branscombe (Cancelled)
Newquay
Kemble
South Cerney (Overflight)
Fairford (Low approach)
Brize Norton (Low approach)
Little Rissington
Upper Heyford (Cancelled)
Gaydon (Overflight)
Wellesbourne
On a cold and foggy morning on the 19th January, twenty enthusiastic Guild members checked in at the Guard Room at RAF Scampton. Having shown some form of identity and verified our car number plates we were issued with visitors passes and lined up behind Sqn Ldr Jon Trott’s Land Rover.

He lead us past a maze of buildings to the HQ of the Red Arrows Operations complex where coffee or tea and biscuits were waiting.

The day started with a fascinating insight into the background and recruiting procedures given by Flt Lt Kirsty Moore, RED 3. Kirsty is the first female pilot to be selected to join the Red Arrows. All applicants have to be above average pilots and have completed at least 1500hrs on fast jets and completed at least one front line tour. Thirty one year old Kirsty was previously based at RAF Marham flying Tornados. She explained that her selection was the toughest two weeks of her career, the schedule was intense, not only flying skills were assessed, but time had to be spent with the other members of the Team, eating, drinking and relaxing. Only then did the current Team members get together to decide whether she would fit in to their rigorous flying schedule.

Only two new pilots are joining this year for a three year tour, the other being Flt Lt Ben Plank who was based at RAF Cottesmore in Rutland. The Team are due to perform 88 shows this year, including the British Grand Prix at Silverstone and Cowes Week, as well as some overseas venues. Sqn Ldr Ben Murphy who has spent the last three years with the Team will continue on as Team leader RED 1 for another three years, an unusual event.

Two further REDS gave us talks on their positions and roles in the formation, including Flt Lt David Montenegro (Monty), RED 7, who explained the role of the Synchro Pair, who approach each other head on at a closing speed of 700kts! Quite clearly no margin for error.

After a good hot lunch Sqn Ldr Ben Murphy addressed us with a few well chosen words and presented us with a splendid framed picture of the Team in a vertical climb signed by all the Team members. I responded with a vote of thanks on behalf of the Guild for a splendid and fascinating day.

All Guild members were anxiously watching the weather to see if the fog would lift and the Team could fly. Having visited the hangar and had a close look at their beautiful Hawks, one of which was being repaired after a too close encounter on the nose with a seagull in Gibraltar, we returned to the operations room. The fog was clearing but alas by 1530hrs the cloud base was only 200ft so no flying was possible.

It was a fascinating day, a big thanks to Sqn Ldr Jon Trott who attends to the many needs of the Team, he and everyone associated with the Team made us all so very welcome. We wish them all a most successful 2010. I will now watch their coming displays with a more tutored eye. 

Guild visitors with Team members at RAF Scampton.
Photo courtesy RAF Scampton.
THE GUILD VISITS NATIONAL AIR TRAFFIC SERVICES AT SWANWICK

ASSISTANT, SQUADRON LEADER CHRIS FORD

On Tuesday 16th February the Master Elect led a group of Guild members on a visit to the now well-established London Air Traffic Control (ATC) Centre facility at Swanwick. Two groups of twelve were offered half a day each in order to give our host Dave Durnford from ATC Operations the best opportunity for a personalised briefing and tour of the facilities.

National Air Traffic Services (NATS) is solely responsible to the Civil Aviation Authority (CAA) for the provision of en-route Air Traffic Services within the UK Flight Information Region(FIR)/Upper Information Region(UIR) and has two major ATC Facilities, one at Prestwick (Scottish) and the other at Swanwick (London). Between these two locations some 2.4 million flights (12% are over-flights and 88% inbound/outbound to the UK) are handled each year and at Prestwick a further 420,000 Oceanic flights are managed annually. The facility at Swanwick, which is located close to the Solent in 100 acres of nature reserve, was handed over in 1994 and became operational in 2002 when London Area Control moved from West Drayton. The arrival of the London Terminal Control in 2007 completed the relocation from west London. This facility is fully self supporting with two 5,000Kw generators with fuel supplies for seven days to provide all the necessary power should the local infrastructure fail. NATS is not just responsible for the provision of the national air traffic services, as a company it also provides ATC Services at nine International and Regional Airports from Aberdeen to Southampton, Belfast, Birmingham and Gibraltar.

Swanwick, with its fully up-to-date computers and state of the art technology, has seen a big improvement of the service since the days of West Drayton. ATC assistants and controllers work in light, spacious, comfortable positions beside their respective pods (‘bananas’ as they call them) arranged in banks of six in the Area Control Centre (see picture). Within Terminal Control the workstations are conventionally placed around the room with supervisory positions in a central square (see second picture). Close liaison is maintained with adjacent FIR/UIRs to ensure a steady flow of traffic into UK airspace and to enable the watch supervisors to husband their resources to maintain safe working practices and not overload the controllers at any stage. Over the past few years air traffic within the UK airspace has grown by an average of 3.3% per year and Terminal Control alone now handles 1.3 million flights a year with an average of 1300 flights daily into Heathrow. This growth has been anticipated and there is plenty of spare capacity to see this trend continue into the future. Throughout all this though, tradition dies hard and the old paper flight strips are still to be seen adjacent to the computer screens! However, continuing technical advancements will see these disappear in the near future.

Dave Durnford reiterated that the 1400 staff at Swanwick provide a 24/7 service and revealed that NATS is partnership owned, the Government holding a 49% share, a consortium of airlines (BA, BMI, Thompson Fly, Virgin, Monarch, Easy Jet and My Travel) 42%, BAA 4% and NATS employees 5%. After an hour long very comprehensive briefing the visitors were taken to the Area Control Centre where the London Flight Information Service (London FIS) is located. Two Flight Information Service Officers (FISO) monitor the three London FIS frequencies and are capable of receiving all transmissions bar those from the lowest altitudes. Equipped with boards showing the southern half of the country covered with pins of various colours, the FIS provides a Basic Air Traffic Service Outside Controlled Airspace (ATSOCAS). This may include the provision of weather information, Danger Area activity, active parachute zones and the availability of the most suitable airfield, whether a major aerodrome or a minor airfield. Furthermore, the FISOs can provide a wealth of information from many sources, be it computer or publication based and Flight Plans may be activated through them. The main point brought out during the visit to this facility was that the FISOs are capable of providing a very comprehensive service. It was interesting to note that these FISOs have a Flight Information Display (FID) to give them situational awareness of the position of aircraft calling them - if they need it. However, this is not a radar service and these operators are not validated to give radar information to pilots.

To the rear of the Area Control room and embedded within the Terminal Control room is the Distress and Diversion (D&D) Cell manned by members of the RAF. This facility permanently monitors 243.00 and 121.50 enabling almost instantaneous auto-triangulation on all transmissions from an aircraft in distress. Faced by a bank of information (see picture) the assistant can inform the aircraft of the nearest suitable airfield, depending on the requirement for Arrestor Cables, Jet Barriers, landing distance available and current weather situations. Always keen to hear from pilots for training fixes, the staff of the D&D Cell
report that they are often very busy at the week-ends. Personally, on two occasions, I have heard them guide lost pilots back to their airfields in the South and Midlands by using a refined mapping system that ranges in scale from the standard 1:500,000 down to 1:50,000, enabling the assistant to guide the pilot from town to town, along a railway line, or even to follow the main road till they find their destination! They have probably not only saved millions of pounds of valuable fighter aircraft in an emergency but have prevented a few simple first solo cross-country flights from ending in disaster. They are there to help and will only turn away a call if there is a greater emergency.

NATS are providing a valuable service, not just to the airlines, but also to military and GA aviators in all classes of airspace. The visit showed members of the Guild a small but vitally important part of the large operation that is Swanwick. We came away having a greater understanding of not just the FIS and D&D cells, but the whole of the service that NATS provide from the upper air down to the smallest airport. All in all it was a most enjoyable and informative visit that I can commend to any aviation-related group.
On 12 February 1942 the German capital ships Scharnhorst and Gneisenau, with the surprise and made their infamous ‘Channel Dash’ from Brest, where they had been under repeated attack by Bomber Command, through the English Channel to the relative safety of Germany. Intelligence had indicated that such an operation might occur but it was thought probable that it would happen at night - also the departure from Brest eluded reconnaissance for technical and weather reasons. The only British strike aircraft immediately available were six Fleet Air Arm Swordfish of 825 Squadron waiting at Manston for a planned night attack in conjunction with Motor Torpedo Boats.

Thus it came about that these six aircraft, each with a crew of three, were sent out at short notice for a daylight attack. They were led by Lt Cdr Eugene Esmonde who had been awarded the DSO for his part in the destruction of the battleship Bismarck. In the event only a relatively small fighter escort was ready and Esmonde, realising that it was ‘now or never’ for his slow aircraft against the enemy warships which were steaming at top speed, led his force towards the German ships. Several torpedoes were launched in the face of withering fire from ships and fighters but none struck home and all the Swordfish were shot down. All but five of the eighteen airmen died. Esmonde was awarded a posthumous Victoria Cross and the others killed were ‘Mentioned in Dispatches’. The survivors between them were awarded four DSOs and one Conspicuous Gallantry Medal. The official naval historian, Capt S W Roskill wrote: ‘There can, in the history of forlorn hope, be few more moving stories than that of the last flight of No 825 Fleet Air Arm Squadron. Its leader typified all that was finest in the newest branch of the naval service; and the junior members of his squadron followed him faithfully to the end.’

Thus it was fitting that on 12 February 2010, the 68th anniversary, following a wreath laying service in the English Channel, a fine, black granite monument was unveiled at Ramsgate Harbour in memory of these gallant airmen by Admiral the Lord Boyce, Lord Warden of the Cinque Ports and Constable of Dover Castle.

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REVIEW OF 2009
As in so many previous years the flying programme was again adversely affected by the weather.

Once again the most popular visit was for lunch at Oaksey Park, organised by resident Club members Dick Felix, David Mathers and Dacre Watson. Nine aircraft arrived with seventeen members and friends which, together with the ‘ground’ party, made a total of twenty one for lunch.

Despite the weather, three aircraft, with seven crew and passengers made it for lunch at Club member David Corbett’s welcoming Shobdon airfield.

Numbers were disappointing for the formal visits to Pooley’s Swords at Shoreham, three aircraft and six attendees, and the RAF Museum at Cosford, only two aircraft and three members. Not only was the weather against us for Cosford but so was ATC who refused permission for Gerry Gerrard to fly-in as they ‘were full’!!

Only three of the monthly fly-ins to Le Touquet attracted members. Also the visit to Abbeville, arranged by John Davy, for the Royal Aero Club air races had only one visiting aircraft with two members. However ‘French Leave’ at Morlaix, organized by Ian Whittle, was a great success with four aircraft arriving and a total of nine members enjoying the hospitality of a classical French Chateau.

On one of the better flying days of the year Club members formed a large proportion of those flying into the Guild Garden Party at Old Warden. The Guild visit to ‘The Blades’ at Sywell also included Club members among the fly-in visitors.

CLUB LUNCHES
The increase in Club membership has necessitated holding two lunches at the start and end of the season in order to satisfy demand.

Over fifty members and friends attended the ’Start of the Season Freddy Stringer Memorial’ lunches and forty attended the ‘End of the Season’ lunches. For the first time the ‘Summer Lunch’ was held on a delightful summer day and over thirty members enjoyed a typical West London Aero Club barbeque.

PROGRAMME 2010
Many of the popular lunch fly-ins will be included again this year. The Oaksey Park Members have again offered to organize a Club visit and David Corbett has invited us back to Shobdon. John Davy is working with the Aero Club de Somme on arranging a long weekend at Abbeville and the ‘last Friday of the month’ lunches at Le Touquet will remain in the programme.

Yet again Cliff Spink has offered to arrange for us to fly-in to the Keystone airstrip before adjourning to the award winning ‘Pheasant’ for lunch. All being well another first will be to fly-in for a meeting of the Goodwood ‘Breakfast Club’. Also Diana Green is organizing a visit to Halfpenny Green and Gerry Gerrard one to Compton Abbas.

A new venture is an invitation from Peter and Polly Vacher to fly-in to their airstrip to see around Peter’s workshop while waiting the return of Peter’s Hurricane from displaying at Kemble. Without a pub within walking distance the proposal is that we take our own picnics.

As always the season will start with the ’Freddy Stringer Memorial’ lunches on 18th and 25th April. We will hope to be as lucky with the weather as we were last year for the summer lunch and the season will end as traditional with the November lunches.

MEMBERSHIP
The Club membership stands at 112.

For 2010 the West London Aero Club subscription, for those Guild members who fly out of White Waltham, remains unchanged from 2009. Therefore the subscription for an individual member is £170 and for family membership is £220. For the Club’s Country and Passenger Members the subscription will remain £10. Further information can be obtained from the Secretary, Gerald Hackemer at Gerald_Hackemer@CompuServe.com, or a membership form can be downloaded from the Guild web site.
In the interests of broadening the knowledge and experience base of our membership, four prospective new members have accepted invitations to observe recent TASC meetings, and pre-meeting presentations have been welcomed from the Light Aircraft Association and comprehensive view of the work of AOPA. A recent chance remark by the Chair of PACTS, regarding the low profile of aviation contributions to his Committee, will lead to a presentation in March and hopefully a raised future aviation profile in that context.

It is pleasing to report that agenda items, addressed at each meeting by a significant proportion of the total TASC membership, serve to collate and drive forward much related activity arising within other aviation debates and some extensive e-mail exchanges between meetings with our nominated subject experts. This aspect is fundamental to some of the most significant issues, where co-ordinated discussion within the aviation areas of responsibility is crucial to achieve meaningful progress.

The Guild has responded comprehensively to a number of industry consultations by the Authority, most recently seeking greater research and less haste before enroute NDBs are removed, possibly to the detriment of navigation accuracy within the open FIR. The TASC is greatly indebted to Terry Gill for his co-ordination of this response and research activity.

The Guild is pressing hard for a robust and long term back up option for GPS, especially when faced with options closed by US political decisions and denials that any problem exists.

The integration of unmanned aviation into the arena is raising the potential for the potential for a fundamental review of risk in all sectors of operations. “Sense and avoid” must be guaranteed, but to what risk level to be compatible with current “see and avoid” operations in the open FIR.

The major safety issues identified by the Authority, headed by the wide ranging “loss of control” title are all receiving appropriate Guild input. Further discussions with FAA through our liaison with Kathy Abbott and the results of the Safety Conference later this year may clarify progress and the scope of the task.

Aviation security is still an issue and, with the approach of the Olympics, the GA world may well be faced with a major intrusion of such matters into their sphere of operations. Problems with the accuracy of runway surface condition measurement and the transfer of such information to operating crews have been highlighted by the recent extended UK and Europe weather conditions, along with a number of minor runway excursion events. This may, however, prove to be a useful stimulus to move a discussion forward, which has been on the table for too many years without significant progress. We look forward to progressing all these items through the new 2010 session.

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**BOOK REVIEW**

**THE NATURAL NAVIGATOR**

by Freeman Tristan Gooley

REVIEWED BY ASSISTANT, GROUP CAPTAIN TOM EELES

Did you know that you could determine the direction of North by looking at a simple puddle? I certainly didn’t until I read this fascinating book by Freeman Tristan Gooley titled ‘The Natural Navigator’. He describes in great detail how to find direction and navigate solely by reference to many natural objects all around us, such as trees, hills, moss, algae, clouds, plants, sand dunes, the sun, moon and stars and yes, the humble puddle.

Readers of Guild News may recall the article titled ‘Long road to natural navigation’ that appeared in the October 2008 issue. This article put forward Tristan’s philosophy of navigation using natural features all around us, and ‘The Natural Navigator’ expands considerably on the detail of how to do it. At times I felt the book became a bit repetitive and over complicated but I shall now take an even greater interest in the objects I see around when out walking and how direction can be determined from them. The copy of the book sent to me was a pre-publication version with only blank spaces where the illustrations will go, so I cannot comment on these other than to say there will be a number of explanatory diagrams and pictures in the published version. There is probably little in the book that can be applied to navigating an aircraft safely and legally in the complex airspace of the 21st century, but if you find yourself flying in an area with minimal nav aids, or, God forbid, forced down in hostile terrain with run-down batteries in your hand-held GPS, then the advice in this book could well see you getting home safely. This is a book for those who enjoy the art rather than the science of navigation and as such is highly recommended.