## Guild Diary

### August 2012
- 9  Pilot Aptitude Assessment  RAF Cranwell

### September 2012
- 11  3rd Education and Training Committee Meeting  Cobham House
- 13  5th GP & F Committee Meeting  Cobham House
- 13  3rd Court Meeting  Cobham House
- 27  Guild Luncheon Club  RAF Club
- 27  Sir Frederick Tymms Lecture  Royal Aeronautical Society

### October 2012
- 1  Election of Lord Mayor  Guildhall
- 4  Pilot Aptitude Assessment  RAF Cranwell
- 9  3rd Technical and Air Safety Committee Meeting  Cobham House
- 11  6th GP & F Committee Meeting  Cobham House
- 23  Trophies and Awards Banquet  Note date change!  Guildhall
- 30  Environment Committee meeting  Cobham House

### November 2012
- 3  Flyer Show  Sofitel, Heathrow
- 6  Benevolent Fund Board of Management  Cobham House
- 10  Lord Mayor’s Show  Guildhall
- 12  Lord Mayor’s Banquet  Guildhall
- 13  4th Education and Training Committee  Cobham House
- 15  7th GP and F Committee Meeting  Cobham House
- 15  4th Court Meeting  Cutlers’ Hall
- 15  Scholarships Presentation  Cutlers’ Hall
- 21  St Cecilia’s Festival  St Paul’s Cathedral

### GUILD VISITS PROGRAMME
- 11 September  Multi Pilot Simulation  postponed from 3 July  Amsterdam
- 19 September  Gliding Centre, Lasham

Please see the Flyers accompanying this and previous editions of Guild News or contact Liveryman David Curgenven at guildevents@dcai.co.uk. These flyers can also be downloaded from the Guild website.

Cover Photo: Guild visitors to Helicopter Emergency Medical Service (HEMS) on the rooftop heli-pad in London during their visit in May. A full description of HEMS appears on page 19 of this issue.
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QUEEN’S BIRTHDAY AND AIR LEAGUE AWARDS. Congratulations to Liveryman Air Chief Marshal Sir Stephen Dalton, Chief of Air Staff, on the award of the GCB in the Queen’s Birthday Honours List. Congratulations also to Past Master Captain Clive Elton for the award of the Air League Jeffrey Quill Medal for outstanding services to the development of air-mindedness in Britain’s youth, and to Past Master Robert Pooley for the award of the Air League Scott-Farnie Medal for most meritorious work in the field of air education.

UNVEILING OF BOMBER COMMAND MEMORIAL. The Master, Air Marshal Cliff Spink, represented the Guild at the unveiling of the Bomber Command Memorial on 28th June. Also present was Liveryman Doug Evans, seen here sheltering from the unexpected sunshine and keeping himself cool before meeting Marshal of the RAF HRH The Prince of Wales. Doug Evans is the founder member of the 10 Squadron Association.

FLYING CLUB VISIT TO POOLEY’S SWORDS. Freeman Dr John McAdam writes: Past Master Robert Pooley, the Chairman and founder of Pooley’s Swords, was both a generous and knowledgeable host to the Guild Flying Club at his Pooley Sword factory situated on a wind and rain swept Shoreham airfield. Eight members of the Guild Flying Club organised by Liveryman Gerald Hackemer in company with an equal number of The Worshipful Company of Cutlers were invited to witness the manufacture of ceremonial swords and learn of the history of this exciting company. Robert Pooley gave a very warm welcome to our group of enthusiasts and explained the history of sword making in Great Britain and the raison d’être of Pooley Sword manufacturing at Shoreham Airfield. He explained that in August 2005, the very distinguished sword makers Wilkinson Sword, who had been established in Great Britain for over two hundred years, ceased trading as sword makers to concentrate on the manufacture of the more lucrative and alternative cosmetic weapon of razor blades. This was not virgin territory to Robert Pooley, who had been commissioning swords from Wilkinson’s for over forty years. Included in the deal with Wilkinson Sword he purchased their drawings, product records, spare parts and much of their machine tooling including both heavy and light machinery. By way of example, he explained how he purchased a Ryder Mechanical Hammer for stamping out the product, which was built in 1886. Within three months Pooley Swords Ltd. was formed to produce military and civilian swords embracing the ‘Wilkinson’ tradition, maintaining such quality by employing ex-Wilkinson craftsmen with their lifelong technical expertise. All Pooley swords are especially forged from traditional carbon steel and tested to the highest standards in the traditional way as laid down by their founder Henry Wilkinson. The completed sword is finally etched and finished to the same high standards expected by the British and Commonwealth Armed Forces. Pooley Sword is now established as the leading supplier of swords to the British Armed Forces and the MoD as well as many Commonwealth and Overseas Defence Forces.

THE HELEN MUIR PRIZE AND GAPAN TROPHY, 2012. Many Guild members will remember the late Doctor Helen Muir OBE, Professor of Aviation Human Factors in the School of Engineering at Cranfield University. During her distinguished career Helen received two awards from the Guild for her work on air passenger safety. The School of Engineering established the Helen Muir Prize, a certificate with a cash award, in her memory and the Guild provided a silver trophy inscribed ‘The Helen Muir Air Safety Prize - Donated by the Guild of Air Pilots and Air Navigators’. The prize and trophy are awarded annually for an outstanding Masters project on human factors related to aviation and formally presented at the School’s Graduation Day.

The award for 2012 was presented to Miss Viravanh Somvang from Laos; she now has a position as an intern with Airbus in Toulouse. Her project was an investigation of violations in general aviation, emphasising the value of training in human factors. Viravanh was accompanied at the graduation by her parents and Past Master Thorning was present on behalf of the Guild to offer congratulations.
Flying Club Visit to Aircraft Restoration Company, Duxford.

At short notice the visit to Keyston was changed to the Aircraft Restoration Company (ARC), Duxford, as a consequence of the Master’s local grass strip at Keystone being threatened with the plough by its farmer owner. The (longest) day, 21st June, did not dawn auspiciously with high winds and heavy rain; in the event only two Guild Flying Club members, Sue Ingle and the Editor, actually made it to Duxford - by road. Nevertheless they were treated to a very personal tour by the Master, clambering all over a Spitfire TR9, a Hurricane, a very early Spitfire Mk1 that was recovered from the sands of Dunkirk and a Buchon, the Spanish variant of the Me 109 with a Merlin engine. The visitors also saw Hurricane LF363 of the BBMF, ‘The Last of the Many’, undergoing deep maintenance and not expected to be completed until September. Given its skeletal state, that would be quite an achievement. One of the engineers had found a rather old flying helmet amongst all the spares and equipment sent from the BBMF, its owner’s name clearly visible - see photo!

The Master proves to be an excellent guide, but was forced to endure a visit to the Museum’s Buccaneer as demanded by the Editor.

The Master describes how to start a Spitfire

The Master’s long-lost flying helmet and Hurricane LF363

The Master, Sue Ingle, the Editor and the Spitfire

Mk1 recovered from the beach at Dunkirk

If it Sounds Too Good to Be True.... Pat Malone, editor of AOPA magazine, writes:

Last April the AOPA magazine carried a story warning of a growing online fraud involving aircraft sales. The situation seems to be getting worse. One AOPA member had two calls within a few days last month asking whether his helicopter is for sale. The price quoted on the web advert seemed just too good to be true... and it is. The advert is fraudulent, created using data from G-INFO or lifted from genuine adverts and padded out with spurious fiction.

The fraud involves mainly helicopters, but fixed-wing aircraft are also being caught up. Usually the aircraft involved is genuinely for sale with a reputable broker, and the online advert is effectively hijacked by the fraudsters who simply lower the price to an eye-catching degree.

Believed to be originating from Nigeria, this fraud is a sophisticated, multi-level operation which has succeeded in parting some fairly shrewd people from their money. Some buyers have lost five-figure sums. Buyers are warned that however plausible the seller, however legitimate-seeming the sale, however ‘refundable’ the deposit, and that unless you have researched the seller, you know they are reputable and that you are actually dealing with them, money should only ever be paid into escrow, with a reputable agency chosen by yourself.

Our member recently had a call from France, from a potential buyer who had seen his helicopter listed on http://www.aviatorsale.com/. “The advert contains just a little fact and a lot of fiction,” the member says. “The next call was from a buyer in England who had seen an advert on a site that was new to me, www.buyplanesforsale.com. This last advert listed the location of the helicopter as London City, which is a bit of a giveaway as helicopters cannot land there.”

The helicopter is in fact genuinely for sale with a legitimate broker, FlyQ, and most of the data has simply been lifted from there by the fraudsters. But other fraudulent adverts have been created from scratch using G-INFO data and photographs.

The helicopter is for sale at £270,000, but one fraudulent advert listed it as $240,000 and another at $235,000. “The fact that both potential buyers looked up my telephone number shows that they were wary,” the owner says. “If it sounds too good to be true, etc...”

The hook is this excessively low offer price - one Bell 407 was priced at $1 million below its market value - and often, an 0702, 0703 or 0704 phone number, which are a fraudsters dream; known as ‘platform numbers’, they look like mobile numbers but charge premium rates and connect to the owner’s mobile, which is usually outside the UK. The ultimate beneficiary is virtually untraceable.

Similar frauds have been endemic to the car sales industry, particularly online, but have become a problem in aircraft sales in the last two years. Mark Souster, Managing Director of Patriot Aviation, knows of several people who have been caught out. “We had a buyer turning up with his engineer to survey an aircraft which was not for sale, but for which he had paid a 15 percent deposit,” he says.

Would-be buyers are led on in a number of ways. One was told by the fraudulent seller that there was a lot of interest in the helicopter, but that he would take it off the market if he received a deposit which would be fully refundable. The buyer could then have the machine surveyed, and if he didn’t want to buy, he could have his money back. The fraudsters often prepare the ground well, hold all the technical specifications of the aircraft, and know the market. They create all manner of authentic-looking but forged documents. Where escrow arrangements have been made, the supposed escrow agency is part of the scam.

Most of the websites will take fraudulent adverts down as soon as they are alerted to them, but some fail to respond to alerts. The fraud may look pretty basic, but some otherwise sensible people have been relieved of their cash. Caveat emptor.
AFFILIATION OF THE ROYAL AIR FORCE OFFICERS’ CLUB JOHANNESBURG, AND THE GUILD OF AIR PILOTS AND NAVIGATORS. A major event took place at the beginning of May when GAPAN formally became affiliated with South Africa through the Royal Air Force Officers’ Club (RAFOC) Johannesburg. Guild members from all over the world who are planning to visit South Africa will be made very welcome if they make contact with RAFOC. To this end, any Guild members who do need to make contact should initially liaise with Past Master Rick Peacock-Edwards (peacockedwards@hotmail.com), who will then facilitate contact with South Africa. The affiliation is, we hope, the forerunner of the establishment of a new Region in South Africa.

The Royal Air Force Officers’ Club in South Africa was formed in Cape Town in 1947, by a group of Officers who had served in the Second World War and who wanted to perpetuate the camaraderie and spirit of the Forces in which they had served. The Royal Air Force Officers’ Club, Johannesburg, was established in 1963 and is based in The Wanderers Club in the Johannesburg suburb of Illovo. In the nature and conduct of their functions, the Club maintains as much as possible of the atmosphere and traditions of an RAF Officers’ Mess. Membership these days, like GAPAN, covers a wide spectrum from the aviation community.

A private dinner to mark the affiliation took place on the evening of Tuesday 8 May 2012 at the Smuts House Museum in Doornkloof, Irene, Pretoria. GAPAN was represented by the Master, Past Master Rick Peacock-Edwards and Upper Freeman Andrew Hoy, Chief Executive of Execujet. Permission to hold this auspicious function at the “Big House”, General Jan Smuts’ home for 40 years, and now preserved as a Museum, was kindly granted by the General Smuts Foundation. The significance of the venue is that General Smuts submitted a War Cabinet Report in 1917 which led to the formation of the Royal Air Force in 1918, and thereafter the South African Air Force in 1920. These are the two oldest independent Air Forces in the world. The invited guests were given a talk on the historic background to the Smuts House in the authentically furnished lounge, below a portrait of the “Oubaas” (General Smuts), and who no doubt was present in spirit on this particular occasion. The house itself started life as a prefabricated British Officers’ Mess in India, was brought to South Africa and erected in Middleburg during the Anglo/Boer War, and was bought by General Smuts as “war surplus”. It was transported from Middleburg to its present site by Ox wagon.

The Certificate of Affiliation, signed by the Grand Master, Prince Andrew, Duke of York, and the Master, was presented to Wing Commander Bruce Harrison, Chairman of RAFOC, and the Articles of Affiliation were signed by the Master and the Chairman, RAFOC, at General Smuts’ desk in his library, which is maintained just as it was in his lifetime. The event was attended by serving and retired Officers of the RAF, SAAF, Fleet Air Arm, and members of GAPAN, RAFOC and the Smuts Foundation. The dinner which followed was in the traditional format observed in an Officers’ Mess. It was not only a very special occasion, it was a historic and very memorable event and those of us who attended were extremely grateful to all those in South Africa who helped to make the evening possible. Our new affiliation was launched in grand style and we look forward to regular contact in the future.

GYM MEMBERS FLY CONCORDE! On Sunday 24th June, GYM members were invited to an exclusive tour of Brooklands Museum by Past Master Captain Mike Bannister, Chief Concorde Pilot for British Airways (retired).

GYM members took a guided tour around Brookland’s historic aviation collection, including the ‘Loch Ness’ Wellington Bomber and a VIP Vickers VC10 previously owned by the Sultan of Oman. The prize exhibit was Brookland’s Concorde G-BBDG airframe. As GYM members watched an on-board video of Concorde’s final landing at Filton, Captain Mike Bannister made a dramatic entrance: “Softest landing I ever flew!”.

Following some photo opportunities in the cockpit of G-BBDG, Captain Bannister treated each member to a 20-min sortie in Brookland’s Concorde simulator - one of very few in the world. Maverick GYM members flew Concorde low-level under city bridges in NY, London and Sydney before witnessing Concorde’s awesome reheat capability!

Special gratitude is owed to Captain Mike Bannister and the staff at Brooklands, for a fantastic experience and an excellent day out for the GYM.
AIR MARSHAL CLIFF SPINK

The Master Writes

Summer - what summer! For aviators of all persuasions the summer in the UK, and I pen this missive in early July, has been quite a challenge but particularly for the GA pilots amongst us. One circumstance of the heavy rain has been the unusually soft grass strips for this time of year - so beware, I have been stuck in mud once in a Spitfire and it does not need me to relate that such conditions can be unforgiving for a tail-dragger.

But the weather has not in any way inhibited my programme which I can report has been as busy as ever. Early in the period, on a personal trip to South Africa for a family wedding, I was able to combine the visit with a dinner hosted by the RAF Officers Club of Johannesburg. Other Guild members present included Past Master Rick Peacock Edwards and Upper Freeman Andrew Hoy, and we were privileged to be hosted in the Jan Smuts House which is now a living museum to this great man who was one of the founders of the Royal Air Force and South African Air Force. I was able to present a certificate of affiliation to the RAFOC signed by our Grand Master and I hope that this will be the first of many exchanges with South Africa. I should mention at this stage that I was able to join many Guild members as a guest of the Central Flying School Association at the Royal Air Force College Cranwell for their annual dinner. This year marks the 100th anniversary of the formation of CFS, the oldest and arguably the most august flying training unit in the world - our congratulations to them and may they continue to set the standard for many years to come.

Finally, and most significantly, I was privileged to join the many veterans and guests in London at the unveiling of the Bomber Command Memorial by Her Majesty The Queen. For once the sun shone brightly and we were witness to the most moving of ceremonies when the magnificent and gallant men of Bomber Command were at last recognised formally for their sacrifices during the Second World War. Over 55,000 airmen perished in the Command, a casualty rate greater than any other formation of any type during the war. Men from all corners of the Commonwealth are remembered in this splendid memorial and I encourage you to visit when next in London. Our congratulations should go to Liveryman and Assistant Malcolm White, Chairman of the Bomber Command Association, who was central to realising this stunning project and whose leadership was so important in overcoming the multitude of challenges - well done indeed. I’ve just seen the sun so time to get airborne.

OBITUARY, PAST MASTER WILLIAM ROBINSON MBE FRIN

It is with great sadness that the death of Past Master William ‘Robbie’ Robinson is announced. ‘Robbie’ Robinson, Master 1973 -74, was only the third Navigator to become Master. He was a Yorkshireman, born in Scarborough where he also went to school. He left school to join the family firm which dealt in ironmongery as well as being a locksmith and offering plumbing services. After being sent to learn more about the business in Birmingham and Manchester he joined the Royal Air Force in 1940. After his training in Canada he returned to the UK to fly with 2 Group as a navigator on Bostons and Mitchells on 50 operations over Europe. Like many others who flew operationally in the War, he spoke little of his experiences.

His long career in British Overseas Airways Corporation (BOAC) started in 1946 on Hythe and Solent flying boats and progressed through Argonauts and Britannias to end on VC 10s. He held several navigation training and management posts retiring as BOAC’s Navigation Services Manager. Ironically he presided over work on Inertial Navigation Systems and Map Displays, the technical developments which eventually banished navigators from the flight deck.

Within the Guild he was an active Chairman of the Technical Committee and, with his friend and fellow navigator Past Master Farndell, he enthusiastically supported the formation of the Australian Regional Committee. As Master he presided over the move to 30 Eccleston Street and the installation of the Guild stained glass window in the crypt of the Guildhall. As an enthusiastic golfer he was, for many years, a stalwart of the Guild Golfing Society. At the Trophies and Awards Dinner in 1977 he received the Johnston Memorial Trophy.

During his year as Master he was keen that the Guild should have a Masonic Lodge associated with it. He made this happen and Per Caelum Lodge was consecrated in 1974, and he became the Founding Junior Deacon. He was Master of the new Lodge in 1978 and achieved London Grand Rank in 1987. He was elected an honorary member in 2001, an honour bestowed on very few.

‘Robbie’ Robinson died on 15th June.

Material supplied by Past Master David Mauleverer and Liveryman Ian Frow
On the unusually balmy early summer’s evening of 24th May some 190 Guild Liverymen and their guests gathered again in the Drapers’ Hall for the 2012 Livery Dinner. The Dinner was preceded by a meeting of the Court, at which four new Liverymen were clothed, one Master Air Pilot and two Master Rear Crew Certificates were presented by the Master. Following the Court meeting a champagne reception started the evening’s proceedings. Dinner was announced by the Beadle, Mr Ted Prior, and the Master, the Guest of Honour Dame Deirdre Hutton, Chairman Civil Aviation Authority and the Principal Guests processed to their places on the Top Table to the traditional slow hand clap. The Principal Guests included Mr D Scahill, Master Engineer, Mr J Lockyer, Master Actuary, Air Chief Marshal Sir Brian Burridge, President The Air League, Mr P Boyle, President Royal Aeronautical Society, Mr J Devaney, Chairman Cobham plc, Group Captain D Bentley, Commandant Central Flying School and Squadron Leader C G Talbot, OC University of London Air Squadron.

At the conclusion of the Dinner, after the traditional sung Grace and the passing of the Loving Cup, the recently elected new Warden Captain Peter Benn welcomed the guests. He began by describing his early attempts at aviation when he tried to launch a rubber powered model aircraft in pursuit of the over-flying Red Arrows, but sadly over-wound the rubber bands causing the balsa wood and tissue covered model to disintegrate. He warmly welcomed the Principal Guests, along with representatives of the Guild’s Regions in North America, Hong Kong and New Zealand, and officers from Guild Affiliated Units. These were 847 Naval Air Squadron, the Army Air Corps, the Central Flying School and the University of London Air Squadron. He concluded by saying “I mentioned limitations earlier. A model aeroplane does not have a placard on the side stating what its limitations are, and nor does a human pilot. In neither case, as I found out, does it mean that there aren’t any. In the human case these are catered for by Flight Time Limitations that state how long a commercial pilot may fly for. A radical change to these limitations is now proposed by the European Aviation Safety Agency, not all of which is based on the known and sound science of human performance and limitations. My personal hope would be that we here in the UK retain the provisions of our current scheme and if change there must be then that change is rooted in sound science and not expediency.” He then proposed the Toast to ‘Our Guests’. The acoustics in the Drapers’ Hall sometimes make it difficult for those at the back of the Hall to hear clearly, so at the suggestion of a Past Master the speeches of the Master, Air Marshal Cliff Spink, and the Guest of Honour, Dame Deirdre Hutton, Chairman Civil Aviation Authority, are reproduced here in full. The Master started as follows:

“Masters, Distinguished Guests, my Lords, Ladies and Gentleman. It is a particular pleasure to welcome you all here tonight to this livery Dinner of the Guild of Air Pilots and Air Navigators and to this magnificent hall - indeed I am most grateful to the Worshipful Company of Drapers and their staff who have provided us with such an excellent meal this evening. And I am sure
The margins in aviation have always been narrow - both physical and financial - and we have learnt to live with those margins to maximise the operational effectiveness, or corporate profitability, without compromising standards or safety. But in the important day to day work that this Guild engages in, through our professional committees and other means - we see an increasing number of fault lines that are extremely worrying. Increasing examples of skill levels - that is basic skill levels - being eroded such that the ability to handle events that occur when technology fails is just not there. A breakdown - or at least over-tension - between management structures and crews - where crew - people - are just one of those commodities like money and machines to be 'managed' with sometimes quite adverse effects on fatigue.

Our military aviators face different but no less significant challenges, but I would be the first to recognise and salute the magnificent efforts of our services that are still an exemplar in all fields. But our military aviation has been reduced significantly and while the financial reasons are understood that does mean that we now have some significant and concerning holes in our structure. By way of example I feel keenly, as a previous commander of our long range maritime patrol force, the complete lack of any capability in this field. We are a maritime nation and we forget that at our peril and the crew skills that we have lost - developed over decades - are irreplaceable, even more so than the aircraft.

One could get depressed about our lot and seek the solution in a jolly good bottle of Bordeaux and wait for someone else to manage us out of the situation. But nobody is going to 'manage' us out of our problems - it is going to take leadership of the highest calibre and at all levels. And here I take a lot of what Jack Welch the late dynamic chair of GE has said. "Call people you would wish to join with me in thanking the members of the Guildhall School of Music who once again have entertained us so well.

Some years ago when I set off on this personal path to eventually become Master of this important working Guild, 2012 seemed a pretty distant horizon and the significant events in my year were Her Majesty’s Jubilee and the London Olympic Games - and keeping my flying medical against the pressure of eating a multitude of splendid dinners.

The Queen has of course been an example to us all in unswerving dedication to this country and has been a true pillar of stability and strength in this sometimes manic world.

I take great pride in the fact that our country secured the Olympic games for this great city despite the many challenges - not least those in aviation - I think we should take time to congratulate the overall team under Lord Coe for getting us to this point without major drama and against the most difficult financial background.

It is the financial background that has been the root cause of so much that I did not see would be of such significance in ‘my’ year particularly in the world of aviation. In all areas of aviation we are quite simply up against it and the litany of challenges makes quite depressing reading.

We in this country are not unique in having these problems and the overarching debate rages between austerity and spend - polarised to a large degree by political argument. We are therefore becoming more and more enmeshed in a debate where the general public believe, to a greater or lesser extent, that salvation lies in one or the other course of action.

Reality is always different and articulating the essential balance between the two positions is extremely difficult - but we must - particularly in our world.

We must also recognise the international nature of aviation and not place restrictions - in the form of crazy passenger taxes - that drive people away from our shores- we are in a competitive, zero tolerance, industry which must exhibit the highest professional standards -and we do. It is a partnership that demands a fine balance between crews, Management, Government and our Regulatory Bodies - and I am delighted that we have been able...
to have Dame Deirdre Hutton, the Chairman of the Civil Aviation Authority, to address us tonight.

Ladies and Gentlemen we can be justifiably proud of our aviation heritage - invention, innovation, drive and courage have been, and remain, watchwords of our profession. And perhaps it is no wonder that when we see someone being successful, in any walk of life, that the expression 'they are really flying' is used. The founding fathers of this Guild placed a motto on this badge of office that I wear tonight - it simply says 'We Fly' - indeed we do, and I can think of no better toast to end my address.

Ladies and Gentlemen please join me in that toast

“We Fly”

Dame Deirdre responded as follows:

“Masters, Distinguished Guests, my Lords
Ladies & Gentlemen it is a very great pleasure, as well as an honour, to have the opportunity to address you this evening. I would particularly like to take this opportunity of congratulating you, Master, on your elevation to the role and of wishing you very well for your year in office.

But I would also like to start by recognizing the very high standards of safety that prevail in aviation in this country. Over the last decade, I have been the regulator responsible for safety in various different fields and I am always very conscious that while the regulator has a significant role, safety is actually delivered by people like you - people who have trained to a high standard and who maintain those standards through scrupulous attention to the many issues that collectively go on achieving a safe flight. So I pay tribute to the contribution of this Guild.

I took office at the CAA just over two and a half years ago. I started at the same time as Andrew Haines the Chief Executive. But since I was appointed first, I then had the opportunity to choose the Chief Executive - nice for me but sadly poor Andrew did not get the same opportunity in choosing his chairman!

In the briefing sessions I had with my predecessor, Sir Roy McNulty, he remarked that he felt he had started his time at the CAA with a comparatively empty in-tray but was bequeathing me a very full one. He listed such things as Europe, the then rising trend in accidents worldwide, the review of our role in the economic regulation of major airports, the looming subject of the environment, etc. etc. Since then of course, we have had volcanoes, the debate around government aviation policy - still going on - the Olympics, to name but a few, so that in-tray is now not just full, but pretty overflowing.

But I must say, when I hear some of the stories of the old CAA, I do sometimes feel that I have joined at the wrong time. The CAA used to have its own jet. A predecessor of mine - and before Sir Roy’s time as well - used to be driven to the steps of the plane, by-passing all those irritants that passengers experience at airports. The Chair of the CAA always used to be in line to greet the Queen when she returned from abroad. On one occasion, I believe the Chairman was dropped off at his jet and flew to Edinburgh where he was met by the CAA chauffeur and car (which had meanwhile driven to Scotland) in order for him to be deposited at Glenegles for a conference. Pity it’s not like that now! However, nostalgia for past glories aside, I do assure you that we are embracing austerity just as much as you and one of my aims is to ensure that when I finish my time at the CAA, I will leave behind an effective, lean and economic regulator.

I mentioned the Olympics just now and wondered how many of you had seen the BA flight arriving at Royal Naval Air Station Culdrose with that great golden nose coming down out of the gloom. What a wonderful moment and how extraordinarily emotional, progression of the torch has been. Finally the Olympics is really coming alive for people around the UK and I am delighted that aviation is playing its part so well. Despite the surrounding economic gloom, it is indeed a time to be proud.

Many of you here will be private pilots who are affected by the security arrangements for London and I am grateful for the constructive way in which you have engaged with the CAA. Contacting every GA pilot has been a challenge but I was very reassured when I found myself sitting with two private pilots at a financial services dinner the other night and each of them had received a communication from the CAA. The current edition of CAA magazine “Clued-Up” is largely devoted to the major airspace changes that will be put in place for the Olympics.

It’s probably true that none of you much loves regulators or regulation. To some, regulation is seen as an unreasonable constraint on business or individuals. To others, it’s the only barrier between them and the ravages of a wicked world. I see it as neither of those extremes - although I readily admit that you are unlikely to become a regulator if you have a deep desire to be loved. But I do think it is necessary, and the trick you have to pull off as a regulator is to balance constraint, rules and regulations on the one hand, with the need to enable a flourishing, competitive and innovative industry on the other.

So a lot of it is about choices and I thought that I would share with you some of the sorts of choices we have to make. But let me start further back with an example from my days chairing the Food Standards

The Master and Immediate Past Master prepare to greet the guests on arrival.

Past Master Rick Peacock-Edwards in discussion with Air Commodore Stubbs, Commandant RAF College Cranwell

A Naval debate between Past Master Colin Cooke-Priest and Liveryman Bertie Vigrass.
Agency because what I have found over the years is that the framework within which you approach safety as a regulator, and the types of tools you have at your disposal, are very similar whether it is food, or aviation or indeed any other area of safety. BSE - I am sure you remember BSE and its human variant Creuzfeld Jacob Disease - a particularly horrible way of dying from an incurable disease which mostly affected the young and healthy. At the FSA we came to a point where we felt that the incidence of the disease had reduced to a level where it would be possible to reduce the protective regulation. We debated the issue in the public arena, well aware that by reducing the regulatory burden we were increasing the risk and equally well aware of the terrible heartache which had been suffered by some families. But by using metrics such as the cost per life saved and by weighing the risk/benefit analysis, we concluded that the regulatory burden should be lifted, despite the small increase in risk. It was, I believe, the right decision. But it illustrates a basic tenet of regulatory life. The scientists (or in your case perhaps engineers or pilots) were able to tell us what the risks of any particular course of action were - if you do A, then B follows, or you could choose to do C and then D will follow. What the scientists could not do was tell us what the appropriate level of risk it was right for the public to bear, that is the judgement that the regulator has to make and it is often a very difficult one. Think of volcanoes and the position we were in when E15 erupted. An internationally accepted zero tolerance rule on the one hand and huge economic loss on the other; to airlines, to individuals and in the end to the UK. The safety of the people in planes (who could be said to have knowingly decided to take a risk) versus the safety of people being overflown who had made no such decision. A difficult judgement to make taken in a highly pressurized situation. Or take noise: we could probably reduce noise to a much more tolerable level around Heathrow if we moved to steeper approaches, something that Emirates are already thinking about in relation to the A380. But there are safety issues involved and it is a straight trade-off between those issues and making the lives of people living around Heathrow more acceptable. The same dilemmas arise for a single pilot flying a light aircraft where you could say that the risk is his or hers to take as they are not operating an airline with paying passengers. But what about the people they fly over? However, at the FSA we did look at the regulatory burden on very small businesses and found ways of lightening that burden. I believe we should see if the same approach could be applied to general aviation. I hope you have noticed, incidentally, that we have been paying a great deal more attention to general aviation recently. A couple of months ago I took the whole of the CAA’s Board to Biggin Hill to hear at first hand from people in that sector of the industry. And your background, Master, reminded me that I had the signal honour and pleasure of sitting in a just re-built Spitfire Mark I. I was acutely aware of the green-eyes waves of envy coming from the assembled, mostly male, party around me! Master, you have mentioned the economy and we are certainly going through difficult and uncertain times. I was struck by Anthony Hilton’s comment in The Times the other day: as human beings, he said, we all find uncertainty difficult and reach for answers. But, as in the war, certainty is unattainable and clear answers are elusive. He felt we should invoke the wartime message “keep calm and carry on”. I agree. However, we also are concerned at the pressures that are being placed on the industry. The vast majority will continue to act with the right attention to detail - cost cutting does not imply less safety. Nevertheless, it is a time to be vigilant over standards and the CAA will be playing its part. For example, safety is now a very prominent part of every board meeting, much helped I may say by Captain Roger Whitefield who is a board member but who is also among the diners tonight. We are also overhauling our systems to ensure that we bring every part of our knowledge of any company together in one “regulatory engine” so that we can take the best decisions possible about the risks that are posed and hence where we should direct our inevitably limited resource. This coupled with rigorous analysis of past incidents, MORs and other data sources gives us a good picture of where the risks lie. But we cannot be everywhere and the more intelligence (whistleblowing) we receive from industry the better we can do our job. I believe very strongly that within a sensible framework, regulators should work closely with the industry for whom they are responsible. The Safety Regulation Group has been putting this principle into practice, bringing into its deliberations wherever possible the expertise of the aviation industry. Regulation works best with respect on both sides and the message I would like to leave with you tonight is that the more we can work constructively together, the more likely we are to maintain those safety standards of which we are so justly proud. Thank you." She concluded by proposing the Toast “The Guild of Air Pilots and Air Navigators of London, may it flourish root and branch for ever”. Photos by Gerald Sharp Photography of the Livery Dinner can be viewed and ordered on line, 020 8599 5070, www.sharpphoto.co.uk
Flying Scholarship Recipients Announced

The Guild of Air Pilots and Air Navigators is pleased to announce the names of the recipients of the 2012 Flying Scholarships. Following an exacting selection process over recent months, a total of four Private Pilot Licence scholarships, four Instructor Scholarships and two Gliding Scholarships have been made. In addition three existing Flying Instructors have been able to improve their qualifications thanks to Guild Bursaries.

Private Pilot Licence scholarships:
The Grayburn Scholarship, generously sponsored by Past Master of the Guild, Mike Grayburn, has been awarded to Thomas Baldock, who is 19 years old and currently sitting his A levels at Itchen College. Already with a background in gliding, he will train in powered aircraft at Goodwood Flying School.

The Cadogan Scholarship, sponsored by the Cadogan Charitable Trust, has been awarded to Sebastian Krzyzewski, a final year student at Manchester University about to complete his BSc(Hons) in Physics with Philosophy. Sebastian is a member of the Derbyshire and Lancashire Gliding Club and his long-term ambition is to become a commercial pilot. His summer will be spent flying with Leicestershire Aero Club.

Megan Foley, a student at St Andrews University, has been awarded the George Dobson Memorial Scholarship for 2012. The monies to provide for this scholarship have been raised in memory of the late George Dobson, IR/RT instructor of Biggin Hill, by his many family and friends. Since 2009, Megan has been a VRT cadet with the East of Scotland Universities Air Squadron based at RAF Leuchars. She now plans to remain in Scotland during the summer vacations to complete her flying training with Prestwick Flight Training.

The Guild PPL Scholarship is funded by the Guild of Air Pilots Trust, which works incredibly hard on a yearly basis to fund all manner of support for Education within Aviation. This year’s Scholarship has been awarded to 17 year-old William Hardy who is currently sitting his AS level exams at Charters School, Sunningdale, and is also a Flight Staff Cadet with 612 Volunteer Gliding Squadron, Air Training Corps. William will train for his PPL licence with Synergy Aviation at Fairoaks.

Flight Instructor Scholarships:
The Swire Scholarship, generously sponsored by the Swire charities, has been awarded to Duncan MacDonald who will train with On-Track Aviation at Wellesbourne in Warwickshire. In 2011 Duncan formed a new Air Training Corps unit at Cirencester which now has over 23 cadets. Duncan already holds a CAA Display Authorisation and flies as part of an Aerobatic Display Team, while his day job is as an Air Traffic Control Instructor, Assessor and Verifier.

The Diamond Jubilee Scholarship is not named after the current Royal Jubilee year, but after the Jubilee of the Guild in 2004, when it reached its 75th Anniversary. The Scholarship has been sponsored since that time by the Air Safety Trust, a charitable arm of the Guild with a remit to invest in Air Safety. As part of that remit the Trust underwrites instructional training along with support of projects pertaining to flight safety. Paul Thomason, a teacher from Yell in the Shetland Islands made the long journey to London to impress at interview and will as a result, have his training funded at Tayside Aviation, Dundee.

The first speaker, Capt Adam Whitehead, the Senior Flight Examiner with the CAA, introduced the concept of Threat and Error Management into basic flying training. This is in line with the precepts of EASA, which has set out the core instructor competencies to be achieved within Part-FCL. Many may view this as just another way of defining airmanship, but Adam’s lively presentation was thought-provoking and (hopefully) will stimulate a new way of approaching the topic.

The two Gliding Scholarships generously provided by the Guild Young Members Group (GYM) will be flown at Lasham in the latter part of August once Olympic Airspace flying restrictions have been lifted. Tobias Radke and Connor Richardson were the successful applicants.

Flying Instructor Bursaries 2012
The three recipients of the Guild 2012 Flying Instructor Bursaries have already flown and completed their courses to gain additional qualifications. Tony Ellams gained his Multi Engine Instructor Rating at Bournemouth Commercial Flight Training, Tom Atkinson completed the training to lift his “no applied instrument” restriction at Ravenair and Dean Foulds had his “no applied instrument” restriction lifted at Bournemouth Commercial Flight Training.

“We are delighted such worthy recipients have been selected for the Guild’s 2012 bursaries and scholarships” said Master of the Guild, Air Marshal Cliff Spink CB CBE FCMI FRAeS. “We wish all our winners well, and look forward to hearing how they progress throughout the summer.”

Guild of Air Pilots and Air Navigators with the Central Flying School Senior Flying Instructors Forum, 9th May 2012

WARDEN DOROTHY POOLEY

The fifth joint Forum held on 9th May in College Hall at Cranwell, thanks to the generosity of the RAF and a couple of private sponsors, saw a distinguished array of speakers from the civilian and military world, both fixed wing and rotary, the original aim of the Instructors sub-committee when it was first established.

The first speaker, Capt Adam Whitehead, the Senior Flight Examiner with the CAA, introduced the concept of Threat and Error Management into basic flying training. This is in line with the precepts of EASA, which has set out the core instructor competencies to be achieved within Part-FCL. Many may view this as just another way of defining airmanship, but Adam’s lively presentation was thought-provoking and (hopefully) will stimulate a new way of approaching the topic.

Before the next presentation, the Commandant of RAF College Cranwell, Air Commodore David Stubbs, was able to join us briefly to welcome us to the College and to speak briefly about the centenary celebrations taking place at
CFS. He reminded us that CFS is the oldest flying school in the world and he kindly offered us the opportunity to visit the library and to look at the photographs and memorabilia around the hall, as there were no students in residence. We were all pleased to take advantage of this offer later in the day, because on previous occasions, the college has been full of students and we have not been able to walk freely around the building.

The Chairman of the Instructor sub-committee, Syd Utting, spoke next and explained the work of the committee which had led to the production of the Teaching Guide on Stalling and Spinning. This Teaching Guide is the first step in the development of a series of modules which aim to embody best practice and to provide assistance to new/lapsed instructors particularly, in developing a series of lessons and lesson plans, thereby taking them beyond the simple pre-flight brief. Sqn Ldr Nick Goodwyn presented the current CFS thinking on how debriefing a student could be tackled. CFS has embraced some neuro-linguistic programming techniques and turned traditional debriefing on its head.

The final presentation before lunch was a fascinating and original look at “Elephants” which can cause the final chain in an accident chain finally to give way. Tim Atkinson, Senior Inspector at the AAIB provided us with his unique insight and analysis of a number of accident scenarios and it was clear from the discussions with other participants over lunch, that his ideas had struck a chord. A bonus un-programmed extra was a quick update on the state of the IMC rating within the EASA machinery, ably facilitated by Nick Willcock, vice-Chairman of the AOPA instructor committee. Nick is well-known for his breadth of knowledge and detail on all things EASA, NPPL and the like and he galloped through the minefield knowledgably and efficiently to leave delegates with much to ponder.

After lunch Mike O’Donoghue of GASCO presented the work that GASCO has taken over from the CAA in the delivery of Safety Evenings at the various airfields around the country. He was followed by David Cockburn of the CAA who gave a detailed run-down of the Teaching guide on VFR Navigation that has just been published on to the Guild Website.

These sessions were followed by a very useful and comprehensive question and answer session at which all of the main speakers participated and members of the audience had plenty of opportunity to clear up outstanding issues.

In the absence of the Master, who was away, the IPM gave a short closing address thanking all of the speakers and participants, and particularly the members of the sub-committee for their organisation.

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**Gazette**

**APPROVED BY THE COURT ON 12 JULY 2012**

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**ADMISSIONS**

**As Upper Freeman**
- Captain Russell Michael ALLCHORNE (HK)
- Major Simon Peter BARR (HK)
- William Michael Henry DEAN (HK)
- Charles Michael Fawcett HAMPTON (HK)
- Grahame Richard HATTAM (HK)
- Captain Christopher Ian HAZZARD (HK)
- Flight Lieutenant James David HOBKIRK (HK)
- Tse Zher OOI (HK)
- Captain David Gerald SIMMONDS (HK)
- Squadron Leader Jeffrey Philip TRAPPETT (AUS)
- Captain Simon Robert Jonathon WALKER (HK)
- Captain Ronald Frederick WEIDNER (HK)
- James David Craig WIEBE (HK)

**As Freeman**
- Simon Scott BAMBRIDGE (HK)
- John HENSHALL (NA)
- Sergeant Terry Robert KNIGHTS (HK)
- Esther Jane LAW (HK)
- Claudia SIN (HK)
- Mark Jeffrey TOUSEY (NA)

**As Associate**
- Wai Shan Lily CHU (HK)
- Edward Francis GLYNN (HK)
- King Yeung Tony LAM (HK)
- John Wan Zhang HUI (HK)
- Khotso Peter MARUMO (HK)
- James Dale MAY (HK)
- Enrique NIETO-WILLIAMS (OS)
- Alexander Glyn Prescott ROBERTS (HK)
- James Richard STANLEY (HK)
- Marcus WARD (HK)

**DECEASED**
- Raymond Lawrence DIXON (NA)
- Peter John FREWER (CA)
- Lord Marshall of KNIGHTSBRIDGE (UK)
- Hayden LAWFORD (UK)
- Past Master William ROBINSON (HK)

**RESIGNATIONS**
- John Lewis BERTRAM (AUS)
- Alan Joseph BISHOP (NA)
- Robert Keith BOUGHEN (AUS)
- Edwin Robert BURNETT-READ (AUS)
- Aaron Bart COLLACO (CA)
- Stephen John COTTON (NZ)
- Anthony Francis FRODSHAM (AUS)
- Christopher Francis JEPHCOTT (HK)
- John Francis SUMNER (AUS)

**FORFEIT ALL BENEFITS**
- John James ANDERSON (AUS)
27 June 2012

The Australian Region of the Guild of Air Pilots and Air Navigators (GAPAN) is delighted to announce the winners of the Region Aviation scholarships for 2012.

**Joint GAPAN/Griffith University scholarship for a Master of Aviation Management Postgraduate Degree**

This year's winner is Ben Catchlove from South Australia. Ben is currently a First Officer at Qantas Airways flying the A330. His career in aviation began while attending Unley High School where he undertook an extra curricular programme that included a few hours learning to fly gliders. He continued gliding during five years as an Air Force Cadet. Ben went on to the University of South Australia to complete a Bachelor of Applied Science in Aviation Studies. During his time at university he gained his CPL (Commercial Pilot Licence), Command Instrument rating and frozen ATPL (Air Transport Pilot Licence). After university Ben started his career with Qantas as a Customer Service Agent before being accepted for a Level 4 Cadetship to become a Qantas pilot. Ben says “I am delighted to have won the scholarship and grateful for the opportunity that GAPAN and Griffith University have given me to obtain a Master of Aviation Management qualification”.

**Joint GAPAN/Assessment Services Pty Ltd (ASL) Scholarship for ATPL Theory Exams**

This year's winner of the scholarship to cover the costs of sitting the Air Transport Pilot Licence (ATPL) exams is Timothy Bartlett from South Australia. Tim is currently a Grade II flying Instructor with Flight Training Adelaide at Parafield. Tim also holds Instrument Rating and Multi Engine Training Approvals. Tim says “I am proud to receive the ATPL Examinations Scholarship and thank both the Guild of Air Pilots and Air Navigators (GAPAN) and Assessment Services Pty Ltd (ASL) for recognising and supporting my aviation pursuits”.

**Joint GAPAN/Assessment Services Pty Ltd (ASL) Scholarship for CPL Theory Exams**

This year’s winner of the scholarship to cover the costs of sitting the Commercial Pilot’s Licence Theory Exams is Jasmine Morris from Victoria. Jasmine is currently a Year 12 student at Mount Lilydale Mercy College and is undertaking her Flying Training part time. Jasmine says “I feel very privileged to have received this CPL Examinations Scholarship. Having this scholarship will enable me to continue with my dream and passion to fly”.

**Chairman’s comments**

Australian Region Chairman, Sue Ball, comments “It is very satisfying to be able to select worthy recipients of the GAPAN regional scholarships. The joint scholarship with Griffith University is a prestigious and valuable scholarship for Ben. Our joint scholarships with ASL that cover the costs of sitting the pilot theory exams give Tim and Jasmine a helping hand towards their future careers in aviation”.

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**REGIONS**

**AUSTRALIAN REGION**

**AUSTRALIAN REGION OF THE GUILD OF AIR PILOTS AND AIR NAVIGATORS (GAPAN) ANNOUNCES 2012 AVIATION SCHOLARSHIP WINNERS**
Inevitably there are times when we encounter situations over which we have little or no control. Pilots instinctively dislike this, being trained to maintain control under all circumstances and to avoid turbulence. But changes to the atmosphere in which they operate are not going to be confined to variations in the weather. Technology advances, commercial pressures rise, and aircraft designers respond. Those designers have long since mastered the science of controllability; in fact they have succeeded in completely automating it. So what might be the effect on working practices of pilots and co-pilots of the next generation of airliners? What follows is mere hypothesis, some might say idle speculation, but the effect on working practices of pilots in completely automating it. So what might commercial pressures rise, and aircraft the weather. Technology advances, not going to be confined to variations in and to avoid turbulence. But changes to maintain control under all circumstances instinctively dislike this, being trained to professional’s lifestyle as all personal credit are based? There is little prospect of a cost of training has fallen on their own smaller, and there is every chance that the comfortable lifestyle and social status. For was often sponsored, still enjoy a Public Perception of the Co-Pilot Well paid captains, whose early training was often sponsored, still enjoy a comfortable lifestyle and social status. For the younger co-pilot the rewards are much smaller, and there is every chance that the cost of training has fallen on their own shoulders. What social status can he or she expect if they can barely pay the rent in the typical metropolis where large airlines are based? There is little prospect of a professional’s lifestyle as all personal credit is probably exhausted after paying for flying training. As for security of employment the parlous state of most airline finances means frequent returns to the foot of the seniority ladder. As in industry the gulf between captains and junior management becomes wider and wider. What a daunting prospect this must be for an ambitious young person! Airline flying is not what it used to be. Furthermore some recent fatal accidents have highlighted the limitations of inexperienced co-pilots faced with unusual handling situations. Inadequate training has been a contributory factor. So measures to improve basic recovery techniques when automation can no longer cope are being suggested. Meanwhile the competence of inexperienced co-pilots has been called into question. The public perception of the co-pilot tends to ignore their general level of professional competence and there is little appreciation of their responsibilities. In complete contrast two non-fatal accidents (A320 Hudson River NY, A380 Singapore) have demonstrated how a well trained and experienced co-pilot has been able to make a vital contribution to saving the day. Such examples need to be given wide publicity to counter the perception of the co-pilot as a mere insurance against incapacitation of the captain.

Some consequences of automated flight

One might ask the question “Is this perception really fair?” The answer would be “Certainly not, but what can we do about it?” We cannot go back to education by a combination of survival skills and analysis of frequent accidents. Automation is here to stay and much of it has enhanced flight safety. But it does tend to make people redundant. The vast majority of flying time in civil aviation is spent managing the automated systems and usually the younger pilots are better at it. Statistically the conditions in modern aircraft which preclude the use of automation are so rare as to be insignificant. No doubt clipper ship captains scoffed at their mates on the new steamers for being incapable of reefing a sail in a storm. It was not long before the masts on the early steamships disappeared completely. However a good eye for the weather remained an essential skill.

Most of the technical advances in civil aviation have started in the military. Flying wire, head-up displays, glass cockpits, terrain following radar and many other systems are the fruits of government sponsored R&D. Air forces need to innovate in order to keep up with potential enemies. How interesting that many of the most successful fighter aircraft are now single pilot machines.

And how thought provoking it is to see a pilotless drone controlled from the other side of the world destroying a hostile vehicle in motion. There is no doubt that such technology could be applied to passenger aircraft.

There was a time when the public would never have accepted a journey on a driverless train. Nowadays it is rare to find a major modern airport without one. The place of the co-pilot in fully automated terrestrially controllable aircraft

I suspect it will be some time before people are prepared to brave the elements in the sky without believing that a human pilot has control. Instinctively they will feel safer, and by having a pilot on board the concept of the captain sharing their risks will make them feel safer still.

But is having the co-pilot on board going to add that much to the passenger’s sense of security? Remember that we are looking forward perhaps 15 or 20 years to airliners capable of being controlled like today’s military drones. So what will justify having a second pilot in the cockpit?

The last question reminds me of the early insistence of the UK rail drivers union to have firemen aboard after steam trains became obsolete. There was no coal to shovel but it was nice to have a mate. Similarly the nostalgia of those pilots used to the comforting presence of a flight engineer cut no ice with the designers of two-crew cockpits.

Let us assume that these future air travellers will feel secure in the knowledge that the captain is capable of taking over control if necessary. In a way we have come full circle. Between the wars an incredible structure of local air services was developed using single pilot small airliners such as Dragon Rapides. Amazingly some of these private companies actually made a profit, and the accident rate was remarkably low given the primitive machinery and infrastructure. The aircraft captains became known and respected in local communities which came to depend on their dedication and skill. That world is long gone, but there is something important to be learnt from it. The air traveller definitely wants to respect the pilot into whose hands he has placed his trust. Invariably it is the captain he is thinking about.

So where does this put the co-pilot? Will the first officer become as obsolete as the fireman on the diesel train? Let me address the second question before dealing with the first.

The Important Legacy of CRM

If we consider the two recent non fatal accidents (A320 Hudson River, A380
Modern communications make it quite feasible to monitor the flight from the ground? Would it not be interesting to spend hours on end? Would it not be preferable to have the pilot be “Not necessarily in the aircraft”. Instead of spending hours watching the cockpit, it is possible for the public to lose faith in the legal system. Imagine if all the functions of barristers and solicitors could be computerised. What calibre of judge would result if the only candidates for the post of judge were computers to exercise real responsibility, because he or she is the captain of the future. The law will anticipate technical advances in order to adapt the profession to the new world. The challenge is to do this without compromising the commitment to high professional standards and continuous safety improvements of past aviators. The co-pilot as an apprentice is work in progress. If apprenticeships are discontinued it is only a matter of time before there are no apprentices left. The public would be shocked if they discovered that the captain’s experience was confined to making multilingual PA announcements.

### Progression to Command

Perhaps an even better case for first officers is made by looking further ahead. If the concept of the one-pilot terrestrially controllable airliner gains public acceptance where will the experienced captains come from once the old guard have retired? If their replacements are inexperienced how will they cope with what are likely to be complex situations where judgment is required? Imagine if all the functions of barristers and solicitors could be computerised. What calibre of judge would result if the only material for the bench was trainee lawyers and pupil barristers who had never argued a case in court? It would not take long for the public to lose faith in the legal system. If the captain is to retain the confidence of the passengers he needs to have served a proper apprenticeship. So the co-pilot cannot be obsolete if the captain continues to exercise real responsibility, because he or she is the captain of the future. The law that captains bear ultimate responsibility for the overall conduct of any flight is unlikely to change.

### Mission Control

The first question was “Where does that put the co-pilot?” The answer could well be “Not necessarily in the aircraft.” Given that our airliner is capable of fully automatic chock-to-chock operation what useful experience is gained by watching this for hours on end? Would it not be better for our inexperienced co-pilot to be monitoring the flight from the ground? Modern communications make it quite possible for him to scan all instruments, read checklists, visually check inside and outside the cockpit, keep the captain awake and amused, and even appear on the MFD if sufficiently photogenic. On a long flight he or she could be relieved by a fresh co-pilot. Relief captains would of course be carried on board for long sectors. Consider some of the advantages of such an arrangement for co-pilots.

### Career Development

Instead of spending hours watching the automatics, flights could be shared between co-pilots thereby releasing them for more valuable training. More simulator time would be an obvious way to accelerate their learning process. Being on the ground, presumably at a main airline base, should mean that extra slots would be easier to programme between co-pilot sessions. Weather delays, jet lag, unforeseen duty hours and other variables would be largely eliminated. Involvement in whatever general aviation opportunities were to be available could be encouraged in order to broaden the experience base. Whether farmed out to small commercial operators, instructing at flying schools or soaring in high performance gliders, the co-pilot would be gaining more valuable experience than sitting in a fully-automated cockpit on a long and boring flight. An in depth knowledge of automated systems with qualifications in disciplines such as robotics might become an essential qualification for promotion to airline captain. The practicality of working towards such goals would be much improved by being largely ground based. Occasional right hand seat flights would clearly need to be part of the mix, but there would be more emphasis on ground based co-piloting. A modern equivalent of the flight engineer’s panel could add training value. In all cases the aspirant to command would need to have demonstrated a profound knowledge of the aircraft systems. Obtaining this by observing and managing actual flight parameters should be more effective than relying on classroom learning alone.

### Dealing with In Flight Emergencies

In abnormal or emergency situations a calm and measured response is a vital element in most successful outcomes. This is always going to be easier to achieve when personal vulnerability is not a factor. Any pilot who has been seriously lost and then brought back on track by a seemingly relaxed and friendly air traffic controller will appreciate the point. So long as the co-pilot is continuously in the loop there is no reason why he should not make as useful a contribution from the ground as from the right hand seat. Of course the best cockpit design would ensure that vital switches and controls were all within reach of the left hand seat. That concept is not new. What could be new is the possibility that such items could also be controlled from the ground by the co-pilot. The norms of CRM would be followed exactly as if the co-pilot was on board.

### Commercial Considerations

For long haul airlines the prospect of having one captain flying (PF), a co-pilot not travelling but monitoring (PNTM), and probably a second captain resting on board, is likely to be financially attractive. As manufacturers need to be responsive to their generally unprofitable clients the tendency to cut operating costs is unstoppable. It is likely that the prospect of terrestrial aircraft control will be welcomed by airlines for various reasons. The cost of such equipment should be reduced if qualified pilots are on board to override it, which would obviate the need for multiple redundancy. However, some airlines would probably be happy to dispense with expensive flight crew altogether. We can safely assume that the public are most unlikely to accept that.

### The Importance of the Apprenticeship

But unless the two-crew concept is protected the danger is that in time there will be no experienced pilots to take over the left hand seat. Airline pilots need to anticipate technical advances in order to adapt the profession to the new world. The challenge is to do this without compromising the commitment to high professional standards and continuous safety improvements of past aviators. The co-pilot as an apprentice is work in progress. If apprenticeships are discontinued it is only a matter of time before there are no apprentices left. The public would be shocked if they discovered that the captain’s experience was confined to making multilingual PA announcements.

### The Statistical probability of accidents contrasted with their consequences

Earlier in this article I made the following statement “Statistically the conditions in modern aircraft which preclude the use of automation are so rare as to be insignificant.” Let me qualify that. Perhaps “statistically” the chances of a blow out preventer failing to shut down a runaway oil well were so rare as to be insignificant until BP had their disaster in the Gulf of Mexico. Insignificant in statistical terms is not the same thing as insignificant in real terms. Look at the effect this accident has had on the reputation and finances of that huge international oil company. Timely human intervention could have saved the day but procedures and training were not up to the mark. In the case of the A380 incident over Singapore quite the opposite was true. Not only the Quantas passengers and crew but thousands of Airbus employees and suppliers have reason to be thankful for that. A major disaster at such an early stage of its history would certainly have been a big setback to the A380 programme. Remember the Comet. Aviation has not established itself as one of the safest forms
of public transport by neglecting the importance of well trained and motivated pilots.

Retaining a well proven command structure

So if this hypothetical single-pilot airliner were to emerge how should the profession react? Refusing to fly it with only one pilot in the cockpit is unlikely to be a viable response. Iberia will not ditch their low cost airline because of a pilot strike. The firemen did not last long in the diesel trains. Such a reaction would only encourage cash strapped airlines to depend completely on terrestrial control, place a mere figurehead in the front seat, and employ “aircraft controllers” rather than pilots to manage the flight. The public might think they were being well looked after until something somewhere went badly wrong.

In order to preserve the well proven safety features of two crew operations, regulators and pilot’s representatives need to insist that no single pilot should be without a second qualified pilot as co-pilot in airliners. However, provided that the aircraft is capable of being controlled from the ground during all phases of flight, the co pilot need not necessarily be travelling on that flight. At all times he or she should be under the command of the captain, unless relieved by another qualified pilot. Except in cases of incapacitation, all terrestrial actions which directly affect the operation of the aircraft should be approved by the captain on board. Standard Operating Procedures should follow best practice CRM principles for two crew operation. The captain on board remains legally responsible for the conduct of the flight and must therefore be in effective control throughout.

Keeping ahead of the Aircraft

That automated terrestrial controlled aircraft will be designed to carry passengers is a near certainty. Manned space flight has shown what can be achieved with earth-based mission control. But flying in our atmosphere is very different from orbiting in space. Thunderstorms, ash clouds, contaminated runways and even migrating geese are only some of the variables which are hard to predict. From the earliest days of aviation it has been the task of the pilot to guide his machine safely through any hazards whether predictable or not. Over time these pilots have shared and analysed their experiences and then applied the lessons to make aircraft operations ever safer. Their success has been the envy of most other industries, particularly in the area of public transport. As Lord Cullen observed in his report on the Piper A disaster “The management of safety is best undertaken by those most likely to be affected by the lack of it.” There will be some, perhaps within airline management, who will see the retention of the pilot-in-command as an anachronism desperately supported by a profession trying to turn back the clock. Lord Cullen’s observation surely gives the lie to that. It should not be difficult to appeal to the travelling public if cost considerations were ever to generate such a cynical approach. Managers who produce football teams without a goalkeeper will soon find themselves without supporters.

There are times when we encounter situations over which we have little or no control. The pace of development of remotely operable passenger aircraft is one of these. So like thunderstorms we need to pick up the danger areas on our radar as early as possible. Then we will have more time to develop a strategy enabling us to work our way around them.

Smiles and Sunshine (with Drizzle) at the Inaugural Henry Surtees Brooklands Team Challenge Race

BY ALEXANDER FOX

On Wednesday 4th of July the Inaugural ‘Henry Surtees Brooklands Team Challenge’ charity Kart event was held at Mercedes-Benz World. The event was organised to increase awareness and raise money for the Henry Surtees Foundation and Kent, Surrey and Sussex Air Ambulance Trust.

Prior to the GAPAN team being entered a very ‘serious’ practice session took place on the 2nd of June at Daytona Sandown Park where young GYM members brave enough to navigate the Jubilee weekend traffic were given the opportunity to prove their worth!

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One series.
The main race event on the 4th July kicked off with driver registration, the drivers’ brief and the opportunity to eye up the competition which included some famous faces from the world of Motorsport notably former Toro Rosso F1 driver Jaime Alguésuari and current McLaren and Mercedes F1 reserve drivers Oliver Turvey and Sam Bird. Not forgetting that McLaren, Mercedes and Bernie Ecclestone had a team entry so Gapan and other teams were up against some serious competition.

Following the drivers’ brief it was onto the track for a practice session to give all the teams a much needed opportunity to test the ‘water’ (circuit) and their Karts. Soon after with a ‘good old fashion delay’ due to a technical problem with the timing system the 2-hour race got underway, started by Nigel Mansell CBE.

The start of the race was relatively uneventful with Dean Foulds up first for team Gapan. Dean set a good early pace for the rest of the team to follow and moved up into 11th place, the driver change was quick and next up was Ed who also kept up the pace until rain made the track slippery and a couple of small spins lost us a little time but Ed’s recoveries were quick and losses minimised. Next up in the drivers seat was myself, again the driver change over was smooth but after just 2 laps the marshals brought me in. It was a mistake and the team frantically waved me through the pits and out again but time and places had been lost. Once in the groove I did my best to keep up the pace and make up the places. Followed by Jamie who was into his first few race laps when a crash at the far end of the circuit warranted a red flag and the race was stopped until the drivers and karts involved were recovered. Soon after the race resumed it was time for the final team member Ludo Forrer to take to the track.

Ludo did his best to improve our standings and overtook a few Karts towards the end of the race finishing 16th out of 33 Karts, which is no small feat for a team of five amateur Karting drivers.

The event proved to be a major success and raised an estimated £54,000 for the charity, the Brooklands Museum and the Kent, Surrey & Sussex Air Ambulance Trust.

I would like to personally thank IPM Wally Epton, the GYM for their team organisation, David Epton for his advice and coaching on both days and not forgetting the generosity of those Guild members who sponsored the team and to those who turned out on the day to cheer us on.

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BENEVOLENT FUND APPEAL

Very many thanks to everyone who has responded to the appeal.

We are off to a very good start with some sixty replies so far. That means that over nine hundred and fifty of you still have the appeal forms on your desks! At present we are promised nearly ten thousand pounds in the first year, which is a super beginning and demonstrates that charitable spirit which is a major part of belonging to any Livery Company. Please keep the responses coming so that we may rebuild the Fund to a level where we may once again offer scholarships to help others learn to fly and to progress in this wonderful world of aviation. The Fund is also seeking two volunteers to replace Trustees who will be retiring next year, please contact Assistant John Robinson, Benevolent Fund Chairman.
Helicopter Emergency Medical Service HEMS, a rural and urban perspective.

FREEMEN CAPTAINS RORY CUNNINGHAM AND NEIL JEFFERS

Editor’s Note: Assistant John Davy organised 2 very interesting visits to the London based Helicopter Emergency Medical Service (HEMS) on 26th and 29th May 2012. Following these visits Captains Rory Cunningham and Neil Jeffers, both Freemen of the Guild, have described the HEMS activities in both the rural and urban environments. The photographs with this article show HEMS helicopters in a variety of unusual landing sites. Rory and Neil’s most interesting stories appear below.

HEMS is a charity and is heavily reliant on donations from the public and corporate sponsorship. The GAPAN visitors donated over £600 towards the operation of HEMS.

Introduction
The United Kingdom benefits from a remarkable array of mainly charity based Air Ambulance units. Despite a recession and ever increasing aviation expenses, these organisations continue to respond to incidents every day of the year and provide a remarkable level of service that often includes the conduct of medical procedures at the incident normally reserved for specialist Emergency Departments. The following 2 articles from the Great North Air Ambulance Service (GNAAS) and the London Air Ambulance offer differing perspectives on flying HEMS. Captain Rory Cunningham is a Training Captain for the GNAAS whilst Captain Neil Jeffers flies for the London Air Ambulance.

The Rural Scene
8000 Square miles. That is the area covered by the GNAAS. Providing a charity based Air Ambulance that covers Cumbria, Northumberland, County Durham and occasionally Scotland, North Yorkshire and North Lancashire represents a huge challenge to the organisation not least of all because of the area’s size, terrain and weather but also from a comparatively limited population from which to fund 3 multi-million pound aircraft.

Having spent the lion’s share of my career in the military the transition to flying HEMS has been a fascinating one. Gone are the days of signing for an aircraft and returning it a few hours later with an empty tank and no great concern for the number of snags accrued, now the individual aircraft we fly have become so important we give them names; Pride of Cumbria, Guardian of the North and as aircrew we treat them as tenderly as we might our first-born. The responsibilities have changed as well. Every-day maintenance is down to the pilot, everything from cleaning the windshield to refuelling and towing her out of the hangar come down to the duty crew. Despite this and with ever apparent consideration for budget lines the GNAAS, along with many other regional Air Ambulances, provide a level of professionalism and service hard to find anywhere outside of the Medical Emergency Response Teams operating on the front line in Afghanistan. This is due, in part, to the fact that some of our consultants and pilots have operated in this very role but mostly it is due to the ethos that drives the organisation and the capability that an A and E Consultant supported by highly trained clinical staff and flown in a fully IFR capable aircraft can bring to a range of emergency situations.

At its most demanding a sortie for the GNAAS can be quite as complex and intense as anything I have ever experienced flying in the military in a number of operational theatres. Owing to the large distances and rural nature of the landscape here GNAAS crews often arrive at scene first and on occasion may be left to deal with the situation alone or with limited resources. That said it is the sheer diversity of situations that add such colour and reward to flying HEMS in this part of the world. Within our area of operations we might work alongside Mountain Rescue Teams attending fallen climbers in the Lake District or alternatively we might be tasked to support the NHS at a major Road Traffic Collision (RTC) inside a busy city centre and everything in between. In order to fulfil this task the charity owns 3 SA365 N2 Dauphin helicopters capable of full IFR compliance. The terrain, weather and distances involved require an aircraft that allows sufficient room to operate alongside the casualty in the cabin whilst transiting in cloud at 150kts towards the nearest suitable hospital. Often, when major trauma is involved, this will be either the Royal Victoria Infirmary, Newcastle or the James Cook University Hospital, Middlesbrough. Both of these can be a significant distance from the scene of the accident and being on the east coast can present a challenge if the patient is coming from the west coast across the Pennines in poor weather. The ability to match specific hospitals with the patient is another of the great strengths of the GNAAS. In consultation with the crew and other agencies, the on-scene clinical lead will make the final decision as to
where to take the patient, selecting from a range of hospital specialities such as Paediatric, major trauma, hyperbaric or burns.

With such a diverse range of geography and terrain the skill set required by HEMS crews is necessarily broad. Air Ambulance crews fly operationally everyday using a number of exemptions to allow them to carry out their role. They often have to fly low level in poor weather, through mountainous terrain, land in very confined areas and rapidly convert to solo pilot IFR with time critical patients on board. Despite the necessarily high level of crew competency all of this is achieved with nothing like the training currency available to military crews conducting similar operations. It is a testament to the AOC holders and charities that they hire and pay sufficiently experienced and qualified crews to maintain such enviable safety records. Every crew conducts a thorough debrief post flight and a culture of honesty and self-criticism engenders a keen awareness for Flight Safety. In addition to in-house debriefing HEMS crews are routinely included in post incident debriefs from across the spectrum of emergency services.

The GNAAS have 2 operational bases, one at Teeside Airport the other out of a private site east of Penrith. The GNAAS responds to calls from the North West Ambulance Service, North East Ambulance Service, Yorkshire and infrequently the Scottish Ambulance Service. Regional boundaries are of great importance to Air Ambulance organisations as communities stoically support their local charities but occasionally it is necessary to support bordering Air Ambulances or indeed receive help in order to ensure coverage is maintained through busy periods. HEMS callouts have increased six-fold in a decade and as the number of people in places like the Lake District swell during the season so the charity has to work ever harder to maintain coverage. Despite the poor UK spring this year GNAAS flew over 100 missions in May alone and that number is likely to increase in the event that summer ever arrives.

The Urban Scene

London’s Air Ambulance is the charity which runs London’s helicopter emergency medical service. It has been operating from the roof of the Royal London Hospital since 1989. Last year we moved to a helipad on top of the new building. This new helipad is one of the highest rooftop helipads in Europe at 320 feet above sea level. The service is unique in that it operates 24/7, with the helicopter running in daylight hours and rapid response cars taking over at night. It was the first air ambulance service in the UK to deliver anaesthetic, perform open chest surgery at the roadside and to carry blood on board.

For the last 10 years we have been operating an MD902 Explorer. Uniquely the helicopter is flown by two pilots, owing to the complexity of airspace and landing sites within which we land in London. Both pilots are instrument rated which allows an IFR capability should we need to transfer a patient to a specialist centre out of London, for example a burns patient. Contrary to popular belief the helicopter’s main role is not to pick up patients but to deliver the medical team to the scene of the incident as quickly and safely as possible. It does, of course, carry a stretcher but is rarely employed. The Medical Team, which at all times includes a Senior Trauma Doctor and a specially trained Paramedic, performs advanced medical interventions, normally only found in the Hospital Emergency Department, in time critical, life threatening situations. Another flight paramedic is on duty in Ambulance Control to monitor ‘999’ calls. The London Ambulance Service receives around 4500 ‘999’ calls a day and it is the paramedic’s job to filter these calls and task the helicopter/car to the most appropriate call for the service. From over 26,000 missions we have done over the years we have identified specific events that we know to be life threatening. These events compose a list of immediate callouts and include patients that have fallen greater than two floors, patients that have been struck by trains and patients that have been trapped under vehicles to name a few. The remainder of our tasking comes from the paramedic interrogating callers to glean more information and from requests from the other emergency services.

Before working at London’s Air Ambulance I was working for a large helicopter training company. Instructing and examining pilots found me flying around the London area for 10 years. Being familiar with London and its congested airspace is one thing but landing within the busy metropolis four times a day presented new challenges. Wires are less of a concern in London than one might expect. Most of the powerlines are underground so our focus is on the harder to see smaller telephone lines that quite often extend over school play grounds. Another consideration for our ad-hoc landings is FOD or foreign objects damage/debris. Items such as shop hoardings, cardboard boxes, plastic bags etc can easily be lifted by the aircraft’s downwash and re-circulated against nearby walls and potentially back through the rotor disc. Luckily the MD902 helicopter employs a NOTAR system (no tail rotor) which reduces the risk to the anti-torque system. The other difficulty in our every-day work which I wasn’t expecting is timescale. The operating area is not large at 600 square miles but this presents its own unique problems. It only takes 11 minutes to fly to the furthest edge of the operating area and our average flight time is around four minutes. Navigating, communicating and landing in such a small amount of time took some getting used to.

London’s Air Ambulance has been involved in every ‘major incident’ within the last 20 years. We are continually rehearsing for as many eventualities as we can imagine. Our role once again would be less of transporting patients and more of delivering medical teams and equipment to the incident sites. During the 7/7 London bombings we flew 32 sectors delivering six medical teams and delivered drugs/equipment to various hospitals around London.

As we aim to take off within three minutes and the average flight time is around four minutes you never know where we will be in 10 minutes time.
Perhaps it was too much to hope that, after the tempestuous and very wet day at Cranwell and Waddington the day before, Guild members would be able to enjoy an aviation spectacle in gentle English summer weather. At least the rain held off - mostly - but there was a wicked gusting crosswind from the south for Duxford’s runway 24. It was noticeable that many of the lighter warbirds chose to take as much of a diagonal path as they could across the area of the grass runway. Nonetheless there was great skill in evidence from many of the tailwheel pilots. Walkers and tail hangers (for want of a better word) were in for a busy day, even being used by the heavier stuff such as late mark Spitfires.

However the wind was perfectly aligned for the Guild’s marquee on the flightline - it blew straight through. It was a good job IPM Wally Elton could burnish long-forgotten scouting skills and tie up the “door”! Picnics could then proceed, although possibly with less wine for those with sore heads from the CFS dinner the night before.

There was in fact a handful of IPMs in attendance. Rick Peacock-Edwards lurked in a rather fetching red Imperial War Museum jacket. The current Master was spotted on the flightline. It was the arrival and welcome day for the Flying Legends air show - one of the biggest events in the Duxford calendar, and a little earlier than usual due to the dislocation caused by the Olympics. The day was rather unstructured, with no programme as such, and no commentary, but there was a wide variety of types coming and going - mostly coming. A Norwegian C47 looked very stately. The WW1 warbirds duo did a sterling job in landing in difficult conditions. We were treated to a Thunderbolt and P51 display, with the latter’s characteristic whistling from the radiator scoop enough to wake those who might have drifted into post-picnic torpor. It was also a joy to see the Lufthansa Ju52 trimotor wallowing around the circuit.

My guest, John Rosier, son of the last CinC of Fighter Command, was disappointed not to see his father’s Hawker Fury around. The Retrotec restoration was instead on static display at Goodwood’s Festival of Speed (the Earl of March has upped the aviation quotient for this year’s Goodwood events). Nonetheless it was a pleasure, as always, to amble through the hangars to marvel at the quality of the IWM’s static displays. It was also somewhat easier to leave the airfield at the close of play whether by car or aircraft, than it would have been a day or two later.
"A visit from CFS". That phrase was enough to galvanise the instructors on the University Air Squadron that I had the privilege to belong to back in the early 1980’s to even greater heights of efficiency and attention to detail. A two page A4 sheet was produced, cheerfully entitled: “How to Hack It”, for the Students to read, hopefully absorb and, (better yet), to act upon, outlining common errors and omissions in our typical sortie profile on the venerable Bulldog T. MK. 1 aircraft. Briefings were held: - “It’s another sortie”; “Treat it as you would a normal trip”, the Instructors said, and yet it clearly was not just a typical detail.

The Great Day of the visit came, and with it my first and only trip with a CFS Instructor. I was taxying out, (thoughts of “How to Hack It” swirling around in my early post-solo head), with Sir, a straight-talking man who seemed ancient but in reality was probably younger than I am now. To break the ice, Sir said: “Well Bloggs, what are you studying at Uni then?”

I rather nervously replied: “Colonial History at the School of Oriental and African Studies, Sir.”

“Good Grief”, Sir replied, “I taught Flight Lieutenant Jerry Rawlings, (the post-colonial revolutionary leader from Ghana), to fly!”

Aviation was, (and remains), I was learning, a small world.

And so it was with considerable curiosity that, thirty years later, I joined a party from Gapan so ably and kindly organised by Assistant Squadron Leader John Davy, himself an alumnus of CFS, to visit them in their home at RAF Cranwell, their current base following a series of moves initiated in 1976 from their previous long-standing Cotswold base at RAF Little Rissington.

RAF Cranwell was a revelation. Mile after mile of Lincolnshire farmland does not prepare you for the grandeur of the RAF College building itself. Inside, it is in immaculate condition. What foresight the Founding Fathers, The Royal Naval Air Service, had when requisitioning the land on which it was built from the Earl of Bristol’s estate in 1916! Miles from the distractions of London, there could be no nipping up to the Kings Road Sandhurst-style on a Friday evening from distant Lincolnshire. Lincolnshire itself is almost as flat as the Canadian prairies: ideal airfield country. As well as the College building, RAF Cranwell has not one but two airfields; the north airfield, a separate grass strip and the main airfield itself.

Units based at RAF Cranwell as well as The Central Flying School are: the Officer and Aircrew Cadet Training Unit, where all RAF officers and airmen aircrew are trained; the Headquarters for the RAF Recruiting Organisation, along with officer and airmen aircrew selection. The training for RAF recruiters and selectors also takes place there. Number 3 Flying Training School delivers the initial flying training for all military pilots and the advanced training of pilots selected for multi-engine aircraft and the rear-crew of all aircraft types from the main airfield at RAF Cranwell. Air Cadet flying on the Air Experience Flight also takes place on the Tutor aircraft. Other units that are based there include the Air Cadet Organisation, the Defence College of Aeronautical Engineering, the Air Warfare Centre, the bands of the RAF College and the RAF Regiment and other specialist medical, engineering and security organisations. It’s a busy place.

After a night in the RAF College building the advance party met the main Gapan contingent the following morning at the main Guardhouse, once the railway station buildings serving the College on the dedicated branch line from Sleaford, opened in 1917 and closed in 1956. Liveryman Squadron Leader Nick Goodwyn RAF from CFS and his colleagues were there to meet the Gapan party at 0930 hours, and a coach transferred us to the CFS building for the initial brief from the Wing Commander, the CFS Commandant being away greeting the CFS Association members attending that day. This was not just a Gapan visit, but an event held in conjunction with the Central Flying School Association Annual Reunion, with a dinner later that day at which there would be a graduation of newly Qualified Flying Instructors from the school and, most significantly, the One Hundredth Anniversary of the School would be celebrated.

CFS, the Wing Commander explained, existed to ensure standards of pure flying were maintained across all disciplines in the military, including Unmanned Air

Put a few QFIs together and they’ll immediately start briefing each other...Liverymen Peter Dodworth, John Robinson and Tom Eeles all served on CFS.
Vehicles, and in live as well as synthetic training. Their role was to Train, Test and Audit, to advise, to teach, to practise and to assess. Breaking those down he said that Teaching meant delivering an introduction to teaching and to the technique of facilitated instruction to instructor trainees, Practise meant mentoring A2 and B2 instructor category checks and standards, (of which more later), and to Assess meant re-categorising instructors moving between instructional grades and conducting 24 month standardisation checks to assess the training output of the military instructor community.

Some history followed. The first course was run on the 12th of May 1912 under the command of the first CFS Commandant, Captain Godfrey Paine, Royal Navy. Today’s instructor candidates who come to CFS to attain the title QFI - Qualified Flying Instructor - meet certain criteria before they even arrive. Generally, they have a minimum of 500 flying hours, have been assessed as “High Average” grade across their flying, have the necessary attributes for being Captain of a multi crew aircraft if selected to train on that type, have excellent “OQ’s”, or ‘Officer Qualities’ and have survived a close scrutiny of their “Form 5000”, their flying record to date.

RAF Instructor categorisation follows a path defined by instructional experience and successfully passing instructor categorisation tests. The first category after qualification is a B2, held from initial qualification for around 6 months, rising to B1 after between 6 and 18 months of instructional experience. A2 Category follows after 18 months or more of instructional experience, with the coveted A1 categorisation potentially following after 24 months or more of instructional experience and successfully passing a highly demanding set of tests.

The RAF’s QFI Categorisation scheme, the Wing Commander said, is the benchmark instructor development program that is copied worldwide. To maintain that standard CFS is independent of the chain of command for audit purposes. He went on to say that CFS maintain an open learning culture, taking the best from other Air Forces worldwide and indeed from the wider instructional community via the link with the GAPAN Education and Training Community. CFS also plays a significant role in defence diplomacy, being seen as a non-combatant organisation that is a world leader and as such other nations are very keen to learn from the School.

After this introduction, Liveryman Squadron Leader Nick Goodwyn RAF looked at the techniques used by the School in more detail. Human factors and human performance feature highly in their work. A challenge facing the School is the integration of the Ascent training consortium from industry into the whole RAF training architecture.

The primacy of student-centred learning and awareness of so-called soft skills was central to CFS teaching technique, he said. The days of: “Pin your ears back Bloggs and hear this” as a post-sortie debriefing tool were long over, he explained. Student situational awareness, (abbreviated to SA), was the key to enhanced student learning and performance - the aim was to expand a student’s SA to meet that of the instructor. Planning and rehearsal before a sortie reaped great dividends in terms of student sortie outcome. Educational psychologists advised the school on learning techniques and performance enhancement, and the post-sortie debrief had been identified as central to how a student learns. A student-centred facilitative style was the most effective. An analysis had been made between rotary and fixed-wing teaching techniques and it had been discovered that, even at a basic linguistic level, rotary teaching technique used far more positive language to students. Some may say that this might have something to do with the mechanical proclivities of the aircraft itself, but as a long-term fixed wing man I could not possibly comment!

Listening to Nick was to listen to a master class in instructional technique and learning psychology and I was reminded of what a pleasure it was to hear an expert talk about their subject. The use of learning psychology - how people learn - was fascinating. On completion of his brief the GAPAN party moved across to 45 Squadron for a briefing about their role training students selected for multi-engine transport flying.

The aircraft they use, the Beech 200 King Air executive turboprop transport, are owned by a private company, Serco Limited, and operated by the RAF. Ten aircraft are assigned, 7 with traditional analogue instrumentation and 3 with a digital flight deck. The latter are used later in the course for those streamed to fly aircraft such as the C17 which use that system. Long and short courses are run according to student background, with long course students undertaking 70 hours flying and 31 hours in the excellent simulator whilst short course students do 45 and 25 hours respectively.

The GAPAN party split into two groups, ours going out to the aircraft and the other to the simulator. First impressions were of a compact machine with quite low headroom in the passenger cabin but an excellent and comprehensively equipped flight deck. Over to the simulator. This has a widescreen visual but no movement, however having had a go I barely noticed the lack of motion.

The group then moved off in the coach to RAF Waddington where we joined the CFS Association in a splendid marquee with the aim of watching some of the participants in the upcoming RAF Waddington Air Show perform. Or at least that was the plan. “If wet in village hall” does not really work for an air display however and, as the heavens opened, we
settled down to enjoy an excellent curry lunch served by RAF chefs and some local ale. Many CFS Association ties were in evidence and much reminiscing took place. Water levels rose to around the one inch mark at the periphery of the marquee and then, skies began to clear.

The Battle of Britain Memorial Flight Lancaster opened proceedings, highly appropriate on the day of the unveiling of the memorial to Bomber Command in London’s Green Park. Looking at the magnificent machine was inevitably to think of young men flying across Europe into the most heavily defended airspace the world had ever seen, at night, in an unpressurised aircraft, in winter and facing an enemy determined to inflict maximum casualties. The memorial to these incredible airmen was very long overdue and a testament to human endurance and courage in the face of an evil and alien philosophy.

Flying displays by RAF Tutor, Tucano and Beech 200 aircraft commenced, the latter appearing highly spirited by transport Beech 200 aircraft commenced, the latter

Goldsmiths Ford and Pooley joined Assistants John Davy, Professor Diana Green, John Robinson and Tom Eeles for drinks before dinner in the main reception area of the hall. The Master spoke of the Bomber Command memorial unveiling with the Chief of the Air Staff. Did I see Warden Ford taking some delight in walking on ‘the forbidden carpet’ that College Students had to edge around back in the day? Into dinner and subsequent speeches to mark the School’s One Hundredth Anniversary.

The Commandant CFS, Group Captain David Bentley RAF, described the achievements of the School and the challenges ahead, and spoke of his mandate from the Chief of the Air Staff, (CAS), to look into future changes for CFS. He said that it was important to note that this was the Central Flying School, not the Central Flying School of the RAF but THE Central Flying School, and the diversity of the student body from all three armed services and from the Kenyan Air Force proved this. The Chief of the Air Staff in his speech said that he disliked the phrase ‘best practise’ and its implication that, once this state had been proclaimed, there was no further advancement to be made.

The School was, he said, an example of always striving for better practise and that this epitomised what the School and the RAF was about. CFS Staff gave a career summary of the graduating students and their achievements on their QFI Course, and the tri-service nature of the School mentioned by the Commandant was apparent from the graduating student body which included two Royal Navy QFI’s and one from the Army alongside their RAF counterparts. Prizes were presented to the graduating students for performance on their QFI course and the winner of ‘The Top Hat Trophy’ replied on behalf of the Students.

In best aviation tradition it was back to the bar after dinner ended, and we were still there at 3 in the morning, as was CAS, talking to everyone. It was a fascinating opportunity to meet RAF QFI’s and to talk about their work, the contemporary RAF, about the Guild and about flying in general.

This was a highly-informative visit from which I took the primary the RAF attach to student centred learning and facilitative teaching techniques. In the ever more cost constrained world of commercial aviation I wondered if there was a place for RA F teaching techniques and CFS input, and I got the chance to put this to CAS in the bar. He was kind enough to listen to this perhaps far-fetched thought. The excellence that CFS represents shone through this superb visit. Where else can such a diverse group as we get to meet and interact with perhaps the leading aviation institution? The Guild maintains effective links with its affiliated units and it was a privilege to be a part of this visit.