



Air Pilot

AUGUST 2018 ISSUE 28





AIR PILOT

THE HONOURABLE
COMPANY OF
AIR PILOTS
incorporating
Air Navigators

PATRON:
His Royal Highness
The Prince Philip
Duke of Edinburgh KG KT

GRAND MASTER:
His Royal Highness
The Prince Andrew
Duke of York KG GCVO

MASTER:
Captain Colin Cox FRAeS

CLERK:
Paul J Tacon BA FCIS

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A Livery Company of the City of London.

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Diary

AUGUST 2018

14th	Flying Club picnic	Popham
19th	Flying Club Summer BBQ	White Waltham

SEPTEMBER 2018

9th	Company Garden Party	Highclere
11th	Flying Club fly-in/drive-in lunch	White Waltham
12th	AST/APT meeting	Dowgate Hill House
19th	Instructors' Working Group	TBA
20th	GP&F	Cutlers' Hall
20th	Court	Cutler's Hall
25th	Luncheon Club	RAF Club
25th	Tymms Lecture	RAF Club

OCTOBER 2018

1st	Lord Mayor's Election	Guildhall
10th	Pilot Aptitude Testing	TBA
18th	GP&F	Cutlers' Hall
25th	Trophies & Awards Banquet	Guildhall

VISITS PROGRAMME

Please see the flyers accompanying this issue of Air Pilot or contact Liveryman David Curgenvén at visits@airpilots.org.
These flyers can also be downloaded from the Company's website.
Please check on the Company website for visits that are to be confirmed.

GOLF CLUB EVENTS

Please check on Company website for latest information

Cover photo: The RAF 100 flypast over the Mall on July 10th.
Courtesy of MOD Defence Images

A message from your Editor...

Perhaps it is wishful thinking, or indeed the result of an atypical three months of high pressure, drought, and Mediterranean temperatures, creating a more than usually fevered editorial brow, but it feels as though aviation – in several guises – has approached nearer the centre of Britain’s national psyche. Be it the Heathrow expansion (see News page 4), the continuation of RAF 100 celebrations (see page 18), the transatlantic crossing of the first UAV to perform at RIAT, or the implications of Brexit for our aerospace industry (see page 10 for the DAA’s view), aircraft and aviation, together with their associated staffing and infrastructure, seemed to have crept towards the UK’s front page. We can all celebrate how aviation has become more central to our communal well-being.

However it is not all good news: the attrition of Britain’s airfields continues apace. I was struck recently whilst flying towards Britain’s South-Westerly tip, and looking down on Plymouth’s former airport (now in some sort of pre-development stasis), how ludicrous it is that one of England’s more remote regions can allow such a useful part of its transport infrastructure to wither. Moreover the licensed GA airfields of the South-East of England remain, to a greater or lesser extent, under siege. And Biggin Hill has effectively given its resident flying schools notice to quit, whilst making it clear that GA residency is unwelcome.

However, on a happier note, if you want to be reminded of the joys of flight, you could do a lot worse than read Skybound, reviewed on page 12. And if you want a visual feast, go to a screening of the recently-released Spitfire documentary, which has some of the most stunning air-to-air photography ever (in my humble opinion). John Dibbs is the creative genius behind the camera, whilst the piloting genius of several Company members was evident in the flying scenes.

Fair skies, and strong tailwinds.

Paul Smiddy - Editor



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News Round Up

FARNBOROUGH AIRSPACE & EXETER

Farnborough Airport's request for the introduction of Class D airspace in its surrounding area will be met – subject to some concessions to the General Aviation community. The CAA said that, given the increase in business aviation at Farnborough Airport, there was a material safety case for introducing controlled airspace around the airport, to create a known traffic environment.

However, to accommodate the needs of other airspace users, two airspace blocks to the southwest and south of the airport will be classified as Class E, not Class D. These blocks will be notified as Transponder Mandatory Zones (TMZ), allowing access for aircraft without the need for air traffic control clearance – providing they are equipped with a transponder. Radio-equipped aircraft that lack a serviceable transponder may still be able to access these blocks through local arrangement with Farnborough ATC. ADS-B devices will be accepted once considered fully interoperable with ground-based safety systems.

Farnborough will also be required to collaborate on reasonable access arrangements for gliders in three further Class D airspace blocks in the vicinity of RAF Odiham and Lasham Airfield.

Jon Round, Head of Airspace at the CAA, said *“we believe there is a very real safety case for creating a known traffic environment in the vicinity of Farnborough Airport to protect all airspace users.”*

Philip Whiteman, editor of Pilot magazine said *“This decision sets an appalling precedent, granting controlled airspace to one section of general aviation at the expense of the rest of us. TAG Farnborough has sought to partition off a huge area of the sky not to ‘protect’ (the safety case simply does not stand any real scrutiny) fare-paying members of the public, but wealthy private individuals and business executives. TAG has made promises about facilitating passage through the airspace they would control, but private pilots know well the*

limitations to the number of aircraft that can be accommodated and fear the resulting bottleneck in GA traffic attempting to navigate around controlled airspace will hugely increase the danger of mid-air collision. Flyers and indeed the general public should be asking why the CAA seems to value the life of say a racing driver being flown in his private jet over those of a family travelling in a light aeroplane.”

On a different note, the CAA recently refused Exeter Airport's request for some Class D airspace.

HEATHROW FINANCING

Boris Johnson escaped a grisly fate underneath a bulldozer, and the House of Commons may have finally voted to endorse the construction of Heathrow's third runway, but questions surrounding its funding simply become more murky. Not least regarding quite who will pay the further £10bn or so upgrading train and road links to the airport. Heathrow's owners – the international consortium headed by Ferrovial, the Spanish construction company – have been very successful at withdrawing funds from the airport, much less in creating a capital structure suitable for such a mammoth construction project as the new runway. Its latest accounts show debt of £13.4bn, against equity of just £703m. And its 2017 accounts disclose that Ferrovial and fellow shareholders took out dividends of £847m – exceeding after-tax profits by £331m! An innocent bystander might conclude that the shareholders have been too greedy, or perhaps just not behaving as though they had a major capital project over the horizon!

There is a growing suspicion that, with such an unsuitable capital structure, Ferrovial et al will look to its customers, i.e. the airlines, to help fund this expansion. The current passenger charge of £22 per capita is already way ahead of the airport's European competition. There are also, apparently, 10 layers of intermediary companies between Heathrow Airport Ltd – the entity regulated by the CAA – and the ultimate shareholders.

To appease non-metropolitan MPs ahead of their vote on the runway, Baroness Sugg promised an extra 100 flights per week from LHR to Scotland, and that new domestic routes would be “delivered”. The Government wants 15% of new capacity at the airport to be devoted to domestic flights.

Spreading the joy around the UK looks to be compromised by decisions such as allowing Sutton Holdings to keep Plymouth Airport closed. That city is the capital of a region which desperately needs better transport links to the rest of the country. Flying over it recently underlined to the Editor that this is a key aviation infrastructure asset that cannot be allowed to be subsumed by a property development.

Aside from unresolved debate about the increased noise footprint caused by the Third Runway, those against Heathrow expansion may yet be appeased: the CAA has said in a letter to the Government that Heathrow's current plan was “not affordable and financeable” in its present form.

WINKLE BROWN REMEMBERED

Former pilots of Edinburgh University Air Squadron are behind a bid to raise £100,000 to commemorate Captain Eric ‘Winkle’ Brown, who was brought up in the Scottish Borders, schooled at Edinburgh's Royal High School, studied German at Edinburgh University and trained to fly at what was then RAF Turnhouse in the late 1930s.



With the financial support of many former squadron members, private individuals and corporate donors, together with invaluable assistance from



Edinburgh Airport Limited, the first phase of the project to install a bronze statue of Winkle on the Plaza at the east entrance at Edinburgh Airport was unveiled by HRH Prince Andrew on the 2nd July. The life-size statue depicts him as a young pilot in 1930's style flying gear striding towards his aircraft.

The airport management estimate it will be seen by upward of 10m passengers per year. An honour guard was provided by some student pilots from the East of Scotland University Air Squadron and a contingent of Naval Cadets.

The life-size bronze statue was created by the renowned Scottish sculptor David Annand.

The second phase, which has started recently, is to raise significant funds for Winkle Brown Flying Scholarships. Everyone interested in helping some of today's youngsters to take off into life-enhancing flying experiences and possible careers in aviation, or to stimulate interest in STEM subjects, can find out more about Winkle Brown, including watching a video at the Eric Winkle Brown page of the Edinburgh University Air Squadron website. Then, if you wish, please make a contribution to his memory.

See: <http://www.edinburghuas.com/winkle-memorial>

RAF COOKBOOK

To celebrate the centenary of the Royal Air Force, some of the world's top chefs have teamed up with serving RAF personnel to create this truly unique cookbook.

Researched, cooked, photographed and written by acting or former servicemen and servicewomen, the book tours 100 of the territories that the RAF has held a presence in since 1918, telling the amazing stories of its involvement in each region and providing a delicious, authentic local recipe that you'll want to try at home.

This combination of incredible dishes and amazing tales will keep you reading before and after dinner. And contributions from such household names as James Martin, Tom Kerridge and Cyrus Todiwala add a dash of celebrity spice to the book.

One of Britain's most revered and appreciated institutions, the RAF will be celebrating its 100th anniversary in 2018.

All profit will be donated to the RAF100 Appeal charity. The RAF100 Appeal is a joint venture between the Royal Air Force and four major RAF charities – the Royal Air Force Benevolent Fund, the Royal Air Forces Association, the Royal Air Force Charitable Trust and the



Royal Air Force Museum. The aim of the Appeal is to raise money for the RAF family and to create a lasting legacy as we celebrate 100 years of the Royal Air Force in 2018.

It is beautifully produced, and your Editor is slowly working his way through the recipes. So far, so yummy!

It can be ordered from the RAF Museum at

<https://www.rafmuseumshop.com/raf100-cookbook.html>

OPENING OF RAF MUSEUM



His Royal Highness The Earl of Wessex today attended the opening ceremony of the transformed RAF Museum London as part of the centenary celebrations of the Royal Air Force.

After arriving in a 32 Sqn RAF helicopter, His Royal Highness met members of Museum staff, volunteers and partners who worked on and supported the transformation. Other VIPs at the ceremony included Air Chief Marshal Sir Stephen Hillier (RAF Chief of Air Staff), HE Mr Khaled Al-Duwaisan (Ambassador of Kuwait) and Viscount Trenchard (grandson of the founding father of the RAF).

Maggie Appleton, RAF Museum CEO said 'It was a pleasure and an honour to have The Earl of Wessex open our transformed London site in the RAF's Centenary year. Our new exhibitions not only explore the Royal Air Force's extraordinary history and people, but also give visitors the opportunity to look ahead into the cutting-edge future of the service. The Museum's transformation is a celebration of the RAF's breadth and diversity – and we look forward to welcoming visitors from London and beyond to experience it with us.'

Sir Peter Luff, Chair of Heritage Lottery Fund, one of the Programme's leading supporters, said 'As a pioneer and leader of international aviation, and in its Centenary year, the Royal Air Force deserves a world-class museum. Now, thanks to National Lottery players, visitors can explore the powerful, inspiring and often surprising stories of the world's oldest independent air force in a dynamic new setting.'

Sir Roger Carr – Chairman, BAE Systems, Founding Partner of the RAF Museum's RAF Centenary Programme said: "The histories of the Royal Air Force and BAE Systems have been

inextricably linked since the foundation of the Royal Flying Corps. Since 2014 we are proud to have been a Founding Partner for the regeneration of the RAF Museum. The Museum plays an important role inspiring the next generation of airmen, airwomen and engineers.”

The Museum’s ambitious redevelopment features new immersive galleries, supported by a transformed visitor experience which includes a new learning centre, new landscaping drawing on the heritage of the London Aerodrome and RAF Hendon, a new visitor centre including a café and shop, and a new restaurant housed in a 1930s RAF building at the heart of the site. The transformation makes the RAF Museum the only place where visitors can test their flying skills, explore RAF stories, sit inside an iconic cockpit and enjoy a picnic in a single day.

Programmes have also been designed to deliver small object conservation skills and workshop spaces, additional apprenticeships, increased volunteering and STEM (Science, Technology, Engineering and Maths) formal and informal learning activities.

Historic Hendon projects are engaging the Museum’s local community with the heritage of their neighbourhood.

A digital project, ‘RAF Stories’, has been developed through which the public will be encouraged to create and curate their own online scrapbooks using photographs, memories, film and audio recordings to share their experiences or those of their loved ones within the RAF and the broader RAF family.

These stories will be shared internationally online as well as being embedded in the new exhibitions, enhancing the Museum’s storytelling: <http://www.rafstories.org>

The transformed free-to-enter Museum in Colindale, North-West London includes:

- The Duke of Cambridge's Sea King helicopter, from his days as a pilot in RAF Valley
- Three new innovative galleries which explore the first 100 years of the RAF, its roles today and invite visitors to imagine its future contribution and technology

The new exhibitions are ‘RAF Stories: The First 100 Years’, ‘RAF: First to the Future’ and ‘The RAF in an ‘Age of Uncertainty’.



The Master, Denise, IPM and Paula Spurrier outside the Officers’ Mess of RAF Brize Norton on the occasion of the station’s Annual Reception hosted by Station Commander Group Captain Tim Jones on the 20th June 2018

A DAMBUSTERS MEMORIAL IN NORTH HOLLAND

On May 17th 1943 Lancaster aircraft AJ-A of 617 Squadron, flown by Squadron Leader Melvin ‘Dinghy’ Young, DFC and Bar, was on its return flight from Operation Chastise, the attack on the German Ruhr dams. The aircraft was hit by anti-aircraft fire as it crossed the Dutch coast and crashed south of Castricum aan Zee. All seven crew members lost their lives and are buried at the nearby Bergen General Cemetery, as are many other allied airmen. It was especially sad that this crew were lost at the last hurdle since it was the ‘Upkeep’ weapon (remembered by history as the ‘bouncing bomb’) released by them

which was the first to reach and explode against the Mohne Dam, starting its collapse.

A local Dutch family, Jan van Dalen and his daughter Macy Plugge, developed a close interest in this crew and for many years have tended their graves and regularly placed fresh flowers by them. There have been many events to remember this famous feat of arms by the RAF but one of the most poignant took place above the beach at Castricum aan Zee on Friday 18 May 2018, seventy five



years after the raid, with the unveiling of a monument in the dunes. The organisation of this memorial is due to the hard work and persistence of Jan and Macy, who raised the funds and made the arrangements.

FLYING CLUB UPDATE

With the flying season well under way now, the Air Pilots Flying Club has had two successful fly-ins so far; Turweston on 22nd May and Oaksey Park on the 20th June.



Unfortunately, with strong crosswinds at Turweston, members felt that it was a little early to test their crosswind landing skills so the turnout was somewhat limited; that did not prevent those who did make it through the wind form enjoying a thoroughly pleasant lunch in the new control tower block, all very successfully organised by Christopher Moore.



The Oaksey Park event was also threatened by strong winds and low cloud but some nine aircraft flew in (including a rather fine Proctor belonging to Nigel Cottrell and a DH 85 flown by Ron Gammons) and about 35 people did a fine job of demolishing a large pile of M & S luxury sandwiches brought in for the occasion. Several pilots abandoned their aircraft and came by car and their efforts were much appreciated, though special mention should be made of Terry Duhig who landed en-route to wait out the weather only to be thwarted again and thus returning home.



Our thanks to the Oaksey organisers Tricia Nelmes, Chris Reynolds and Dacre Watson.



PAST MASTER

Past Master Brian Pickard sadly passed away on 13 July, aged 96, after an illness of a few weeks. A full tribute will appear in the next issue.



Liveryman John Robinson recently celebrated his birthday with a trip in one of Duxford's 2-seater Spitfires piloted by Past Master Cliff Spink. The grin endures!

BATTLE OF BRITAIN MEMORIAL

The Master attended an event at the Battle of Britain memorial at Capel-le-Ferne recently. He was in good company.



Honorary Chaplain The Venerable Ray Pentland with 100-year-old Wing Commander Paul Farnes (the Last of the Few)



Past Master Wally Epton speaking with Jan Leeming

Representatives of Australian, Canadian and NZ Air Forces showing off national shoulder badges



Prince Michael of Kent and Assistant Sir Stephen Dalton

PRE-VOR NAVIGATION IN THE USA

This perhaps arcane website shows that the assistance given to US pilots (particularly those involved in the carriage of the mails) is still being cherished:

<http://www.dreamsmithphotos.com/arrow/>

EMERGENCY EVACUATION OF COMMERCIAL PASSENGER AIRCRAFT

I have been asked to draw readers' attention to the paper published on this topic by the RAeS, which can be found at:

<https://www.aerosociety.com/publications/specialist-paper-emergency-evacuation-of-commercial-passenger-planes/>



The Commando Helicopter Force and their audience appear to have had fun at the recent RNAS Yeovilton International Air Day

HIGHLANDS & ISLANDS FLYING

PM Chris Ford's write-up of the talk by Bill Innes, prompted the following response from Freeman Mike Carrivick:

The article by Past Master Chris Ford was very evocative of my second year in aviation (all ground-based roles as my flying was very limited to low hours as a PPL).

Starting my General Apprentice training in 1965, I enjoyed 'outstation' training in 1966 at Edinburgh, immediately followed by some idyllic summer weeks on Islay. HP Heralds were the standard equipment for the scheduled flights (just 9 rotations per week) plus ambulance flights as required, though Viscounts were sometimes used as well.

Living and operating with such communities accentuated the importance of air links to these more remote parts of Scotland, for commerce and exports (fresh shellfish to Paris everyday!).

Whilst there, I never experienced the beach landing at Barra (DH Heron) or met BEA's indomitable Kitty McPherson; however, I did achieve the beach landing and take-off in

March this year, aboard Loganair Twin Otters - marvellous!

As a memento of the 1960s, you may wish to see the three airport charts from that time,

gathered during my stint at BEA's Aircraft Library in the Queen's Building LHR.

PS The Loganair crews were delighted and intrigued with the Barra Chart!



The Master's Message

By Captain Colin Cox

Well, here we are – almost five months into my year as Master and my feet are well and truly under the desk. The pace of daily activity has lessened to a degree but the scope has widened considerably. I will elaborate in a moment but firstly I must make an appeal.

It has been widely trumpeted that on September 9th this year we will be holding our annual garden party in the grounds of Highclere Castle, aka Downtown Abbey. Our involvement with preparation for the event has been in train since January. To date we have nowhere near as many members as we usually have committing to attendance. Our Visits Committee Coordinator, David Curgenvin, urgently needs to finalise numbers in order to establish just what size marquee we are going to require. The flyers describe the promise of a full day of fun, with entertainment for all, so if you would like to come to this annual jamboree of ours, I urge you please to respond as soon as possible to try and make David's task a little less stressful.

Having got that plea out of the way, what's been happening in the Honourable Company of late? First and foremost, we can see light at the end of the tunnel with regard to the sale of Cobham House. After what seems an eternity – we finally exchanged contracts on June 8th. This allows for completion of the sale within three months, after which we will have a clearer understanding of where we stand financially. That is not to say that we have any concerns particularly in that regard. It will just clarify our position as we seek to identify suitable premises for a more permanent 'home'.

RAF100 celebrations continue unabated having been kick-started in such a spectacular fashion with the City Livery Banquet reported on in the June edition of Air Pilot. Timed to coincide with the 100th Anniversary year, June saw the official opening of the transformed RAF Museum in London by HRH Prince Edward, Duke of Wessex, to which I was most generously invited. I also found myself invited, with the Mistress Air

Pilot, to the Sovereign's Annual Reception at RAF Cranwell. Having had a civilian career with commercial airlines I found it somewhat disconcerting to be presented with the name badge of Group Captain Colin Cox. Perhaps, I thought, I'd been seen attending that many Royal Air Force events of late, the powers-that-be really did think that I'd had a successful career in the military. I queried why I hadn't risen to the rank of Air Commodore and was reassured that my four bars as an airline Captain had to be better than just the one afforded an Air Commodore.

'Group Captain' Cox and his lady were then invited to RAF Brize Norton along with the IPM and other City Livery Masters affiliated to various units associated with the UK's largest RAF Station. By now however my cover had been rumbled and I was back to being a retired airline Captain. That didn't stop the invitations coming in though. July 1st saw me present at the Battle of Britain Memorial Commemoration at Capel-le-Ferne, near Folkestone. Many of our members also sat down to lunch on this poignant but glorious occasion, where the summer sun continued to beat down in the cloudless skies we have had the pleasure of experiencing as I write. Of necessity I must gloss over detail but hopefully others might put pen to paper, so to speak, in order adequately to describe the emotions at both ends of the spectrum prevailing at many of these 100th Anniversary events, from uplifting to reflective.

It is often forgotten that we are in fact a City Livery Company. In that respect much of our activity involves liaison with the City Fathers and other Livery Companies. More often than not this is confined to ceremonial events, lunches and dinners, but the charitable side of the City is an important aspect of contributing to London life as a Livery Company. Every now and then something comes along which is a little different, and so it was when I was asked to facilitate a Q&A session with European Space Agency (ESA) Astronaut, Major Tim Peake. The idea

was to give the opportunity for Guildhall staff and selected guests to put questions to Tim in a one hour window ahead of his being granted the Freedom of the City of London. I can say that we would very much like to engage more with Tim but he is constrained by his employer, and at this stage I can only say – watch this space! (No pun intended).

Towards the end of June, and a little later than usual in the Master's year, the Learned Clerk secured an appointment for both the IPM and myself at Buckingham Palace with the Grand Master. His Royal Highness generously gave us an hour of his time in his very busy schedule, and enquired as to what the concerns of the day were so far as the Air Pilots were concerned. We touched on potential airfield closures, airspace restrictions, Heathrow's third runway and Brexit amongst other subjects. The Duke engaged knowledgeably in conversation and gave us the benefit of some of his views from a personal perspective. At the conclusion of the meeting he indicated that he would be very willing to engage more with the Company when time pressures abated, although there was no sign of that in the immediate future.

Speaking of technical matters, one valuable area where we as a Company continue to seek to expand our influence is through liaison with the All Party Parliamentary Group led by the Right Honourable Grant Shapps MP. Professor Marion Wooldridge, an Assistant to the Court, sits on the Airfields Committee of that group, one of four sub-committees under the APPG umbrella. Just two weeks ago, as Master, I was invited to a Summer Reception at the Palace of Westminster to further informal discussions as the result of a conversation with a member of the group at the Livery Dinner.

Technical discussions are not just confined to this country as we well know and I am now preparing for my tour of the North American Region with meetings planned in Vancouver, Washington DC, Montreal and Ottawa in that order. It looks set to be a busy schedule but I hope to be fully prepared, willing, and able, to help continue with spreading the name and fame of our Honourable Company.

From the Desk of the Director Aviation Affairs

Liveryman John Turner

BREXIT & HEATHROW

Forgive me for turning once again to Brexit but I begin to wonder if I am the only person in the UK who has started to share the European Commission's apparent frustration at the lack of clarity over the relationship UK wants with the EU on separation. It would be easy to blame this on the government alone but the passionate and contrary opinions within all sides of both Parliamentary chambers have confused any possible political consensus. While the differing convictions are understandable, because the issue is one of momentous realignment, the resultant confusion is unsustainable (unless it is deliberate to force the collapse of all UK's established international protocols).

The Honourable Company of Air Pilots has repeatedly, both separately and jointly with other aviation organisations, provided advice to the UK government on the aviation aspects of Brexit, including our preference for continued membership of EASA and the likely outcomes of failing to negotiate that result. We made those representations firmly but quietly because we felt that approach served UK and international

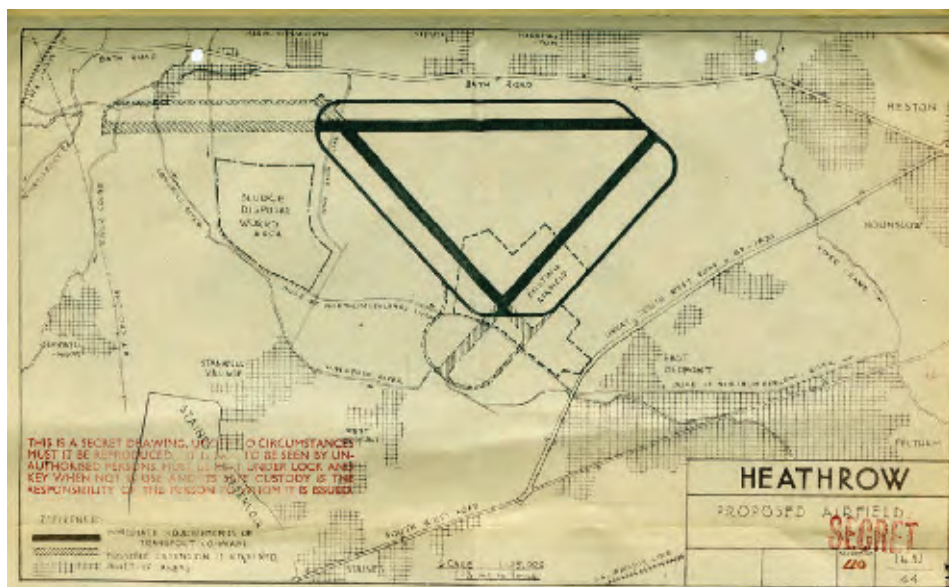
aviation best; we wanted to keep clear of the political and media circus because there is no place for either in flight safety. As I mentioned in my last article, that advice travelled well and our Prime Minister, "reconfirmed her government's intention for the UK to remain part of the European Aviation Safety Agency after leaving the EU," notwithstanding the European Court of Justice being the ultimate arbiter of EASA rulings.

It is most regrettable that over the last few months, many government ministers and members of both chambers of Parliament appeared to place their own political ideas and aspirations above the needs of a safe, viable and successful future for aviation and our country. Aviation needs plans in place NOW for second quarter 2018 and beyond and it takes time to source and train pilots and to introduce (or dispose of) aircraft. A single UK position, whether or not that is known outside the UK's negotiating team, is already well overdue. Equally, there must be confidence on both sides that a negotiated position will not then be over-turned; otherwise, why bother to endure the pain of negotiation? Since the UK and EU want different things, the

negotiations will only be successful if there is compromise on both sides. For aviation, that means the UK people and Parliament must accept that the European Court of Justice will retain its role as final arbiter of EASA rulings; in exchange, those managing and employed by the aviation sector and its supply chain will gain the surety they need, to the benefit of the travelling public, the Treasury and the economy of the EU and UK. Within the UK, the reality of negotiation means that neither 'Leave' nor 'Remain' supporters will get everything they want. Similarly, the EU will only achieve an agreement with the UK if both sides compromise; only an unconditional surrender allows one side to walk away from a negotiation with all its starting position intact.

On 6th July 2018 (yesterday as I write), UK government ministers finally appeared to agree the way forward. I hope this marks an end to the protracted and fruitless period of political squabbling. If not, I fear those responsible for prolonging the uncertainty will be held responsible for whatever economic and social damage occurs in the future.

Of course, all of us voting in the UK's referendum on EU membership might have foreseen that any change of the status quo would take a long time and be fraught with counter argument and posturing. This would clearly be the case when parliament did not have as long to agree on Brexit as it has been taken so far to decide on another runway in the south east of England. Looking through the internet the other day, it struck me that just as UK once was not an EU Member State, there was once a third runway at Heathrow...



FATIGUE & RISK MANAGEMENT

Frustration at Brexit Leave/Remain shenanigans brings with it fatigue but in the world of commercial (business & scheduled) aviation, fatigue seems set to become the elephant in the room that very few wish to acknowledge. Flight crew fatigue has been a concern from the moment it was identified as a cause of aircraft accidents. No two people are the same so the concept of Fatigue Risk Management Systems (FRMS) appeared to be a sensible approach to a long-standing problem and an improvement over a set of universally applied fixed flight time limitations that could never address human variability.

There are some examples of FRMS being applied intelligently as was intended. However, more often the promising theory has become disappointing, if not dangerous, in practice. When introducing FRMS, EASA retained back-stop but (for some Member States, including UK) significantly increased limits; the intent was to allow more flexible rostering while capturing and controlling individual fatigue through FRMS mechanisms, the most important of which would data derived from a comprehensive catalogue of fatigue reports; data fidelity was expected to improve with time so that after two years it would become a really effective safety and human health tool. However, as many commercial pilots and flight crew will be aware, that data is frequently lost because individuals reporting fatigued find themselves declared medically sick or chastised for not resting properly and at the top of any future list of redundancy candidates. That has turned the increased flight time limitation metrics into

planning targets instead of back-stops to a managed system.

Some suggest this is just about pilots (and cabin crew) complaining at having to work harder. However, the number of pilots suffering long-term sickness related to chronic fatigue and who subsequently only manage to continue on a reduced roster illustrates that this issue is real and needs urgent attention. We have even heard of one first officer who determined that as soon as he gained a command he would apply for part-rostering to avoid becoming 'burnt out like the Captains I'm flying with.'

MAG2TRUE

To finish on a more optimistic note, the movement to aviation's universal heading reference from Magnetic to True continues to gain traction. Nav Canada is submitting a working paper to Transport Canada (as the state signatory to ICAO) to raise to switching to True by 2030 at the 13th ICAO ANC. This follows a successful trial flight using True in a magnetic reference part of Canada by setting Mag Var database values to zero. The flight was supported by chart and aircraft manufacturers and shows that technically the switch can be simple.

Growing support for the change does not diminish the major logistic challenge of coordinating simultaneous introduction of True across the world, and the thought of replacing the whole world's charts etc. in one day is daunting. However, unless everyone is able to switch together, a 'crossing procedure' will be necessary. Nonetheless, the maritime world made the switch many years ago, so we are only really playing catch-up. Making the

switch will not be simple but the long-term safety and cost benefits will begin to dominate.

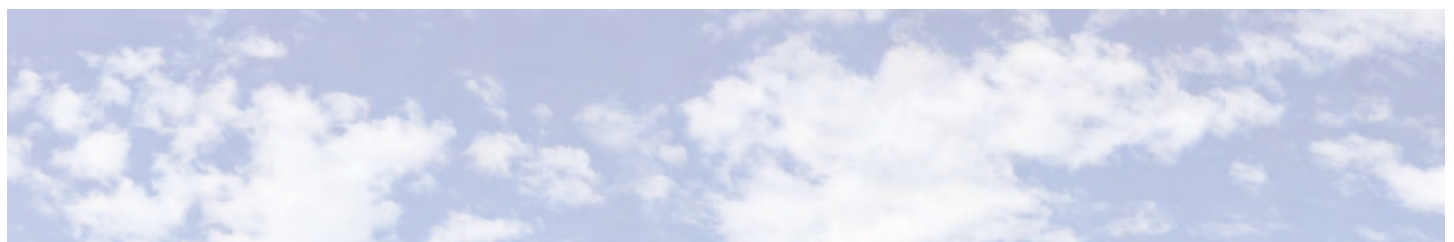
How ironic then that just as the aviators are getting support to switch from Mag to True, some meteorological services have decided they should change their reporting parameters from True (e.g. wind direction) to Magnetic! At an earlier time, we might have welcomed a change intended to help the pilot by removing the need to apply variation to met reports.

We will continue to work to support moves to change to True – and to keep met reports as they are in True too. If you are involved in conferences or discussions over the next few months, please spend some time spreading the MAG2TRU concept – and if you encounter them, send details of any really convincing counter-arguments or smart ways to introduce the change in practice to me.

A FINAL THOUGHT:

- What causes significant (sometimes hidden) damage to commercial aircraft?
- What causes significant dispatch delay?
- Where is staff turn-over highest?
- What is the least internationally standardised part of commercial aviation?

UK CAA has identified Ground Handling as one of its Significant Seven – the main seven areas of risk in the UK Aviation sector. Standby for increased focus and efforts from us to address Ground Handling safety challenges in the future.



GAZETTE

APPROVED BY THE COURT 19 JULY 2018

ADMISSIONS

As Upper Freeman

Karim ATTA
John BASHAM (HK)
Malcolm BINNS (HK)
George de la COUR (HK)
Dominic LAZARUS
Utsav MUKHOPADHYAY (OS)
Brett PETERSON (HK)
Peter James TAYLOR (HK)
Ian THOMPSON (AUS)
Patrick WATTS (HK)

As Freeman

Lloyd ADAMS (AUS)
David CLARKE (HK)
Gareth CUNNINGHAM
John DAVIDSON (NA)
Andrew DINNIE
Steven KIRUPAI
Bronwyn MIDDLETON
Charles PACHAL (NA)
Adam PARNELL

As Associate

Aaron CUNNINGHAM (AUS)
Eden HANSEN (AUS)
Sam POKHREL (AUS)
Will WRIGHT

ACKNOWLEDGED BY THE COURT

19 JULY 2018

REGRADE

As Upper Freeman

Sidney KWONG (HK)
Tony LAM (HK)

REINSTATEMENT

As Upper Freeman

Stuart PRYKE (HK)

DECEASED

Kenneth COOK
Charles OWENS
Louis McQUADE (HK)
John MEREDITH
Malcolm PAYNE
Brian PICKARD
Keith SISSONS

RESIGNATIONS

Diana BIRRELL (NA)
Ella DAVIES
Michael FEENAN (OS)
Joyce GIRDLER
Richard GRAYSON
Alistair HAMMOND
John KEENAN (NA)
Allan MARSHALL (NA)
Andrew ROSE
James SHRAGER
Jonathan STEINFELD (NA)



Book Review

Skybound - A Journey in Flight

Rebecca Loncraine

Picador, April 2018

Reviewed by the Editor

Was it an author who injected the aviation bug into your veins? Perhaps Capt. WE Johns, Antoine de Saint Exupéry, or Richard Bach? Rebecca Loncraine will, I hope, provide the same inspiration for a potential new generation of aviators.

The book's back story grips the heart from the outset – the author decides to become a glider pilot whilst in remission for a ghastly cancer (is there any other sort?). Her illness has already made her very aware of her body and emotions, her creative writing background has given her the skills to share this with the reader. But she is clearly something of a polymath because the science behind meteorology and much of what lies behind glider flying, is well explained – although the physics of stalls and spins are

poorly described. Later in the book there is an informative riff on vultures.

She learns to fly in the Black Mountains of Wales – a fairly rugged landscape by GB standards. She clearly enjoys not just the acquiring of new skills, but also the cerebrality of glider flying, even if it is in the “flying exoskeleton” of a K12. On the way the reader is treated to a run-through of the pioneers that refined a man-carrying glider; whilst giving the Wright Bros due credit, she oddly overlooks Sir George Cayley. She makes reference to Hanna Reitsch, with great deference; presumably she has read Clare Mulley's biography, though with no bibliography, one cannot be sure. Strangely there is no reference to any solo flying – perhaps her medical condition precluded this.

Much of the joy will be familiar to anyone who has learned to fly; although, unless you have read the likes of St. Exupéry or Richard Bach, you are unlikely to have seen it expressed so lyrically.

Throughout the book Loncraine writes with great passion – the passion of someone with a slender grip on life. The second half sees her follow her instructor to New Zealand, where he spends British winters. Here she enjoys, and occasionally endures, what might be described as “extreme gliding” in the NZ mountains. By this time gliding has clearly become her life. Except that it hasn't. Sadly the book ends a little abruptly, and is tailed with a postscript by Rebecca's mother – for she succumbed to cancer in the end.

But what a way to spend one's last few months on this planet! This emotional roller-coaster of a book is, for the most part, extremely well-written – and rather unique in the 21st century aviation canon.

The Aviation Skills Partnership

By the Editor. Photos by the Editor, and ASP

The Aviation Skills Partnership (ASP) was founded six years ago (as a profit making enterprise) by its CEO, former engineer Simon Witts, to capitalise on the growing need for STEM further education, and to capitalise on the UK Government's growing appetite to encourage apprenticeships, and provide funding. Its work is specifically aimed at funnelling appropriately trained talent into the aviation industry, in most of its ground and air-based career paths. Witts retains full ownership.

Gratifyingly and unsurprisingly the Company is well represented in its upper echelons. PM Rick Peacock-Edwards and Liveryman Chris Tarry are on the ASP strategy board, which also includes the likes of Air Marshal Sir Chris Harper (usefully ex Coltishall). The ASP has started by focussing on engineering training, and in June I visited its first establishment, the grandly titled International Aviation Academy (IAA) at Norwich airport. Here they have melded academic requirements with regulatory requirements to provide a BSc honours degree course such that graduates will have sufficient hours to start work immediately at an MRO, i.e. they have created a "Part 145 environment in an academy", in the words of my escort, Emma Rigby.

The course is currently running with an intake of 20 students per year, the first of whom will graduate in 2019. Judging by those who I saw, there is as yet only a modest number of women (2 out of 28 in each degree course cohort), but a broad ethnic mix. The IAA is working



At work on the B737 at Norwich

with the Norwich Science Festival this year to promote careers for women in science. The longer-term ambition is to raise the intake to 80 p.a., of whom half will come from overseas. There is a maximum of 28 to a class, and one can see why when it comes to workshop sessions, or indeed supervising on the 737. One of the USPs of the IAA is that there is a B737-300 on site, ex-Jet 2, but on long-term loan from KLM, on which students can practise their assigned maintenance tasks. The objective is to create a training environment which replicates an industrial one as closely as possible.

Students do not have to be of degree course standard at the outset; 16-18 year olds can do a level 2&3 course; after the Level 3 stint they do an EASA A module, and can then progress to the degree course (the 'B' module). The IAA is publicly funded, and the ASP runs it on behalf of the "delivery partners" (there is

a lot of 21st C management-speak at ASP!), who are the University of East Anglia (which validates the degrees), City College, Norwich (CCN) and KLM. The Dutch airline, which provides 10 trainers at Norwich, has no obligation actively to recruit any graduates, but it would be natural to assume that one of the reasons for its involvement is to provide an early eye on those who might show particular talent as engineers (or other skills, see below). Competition for places on the IAA course is yet to develop into what one might term "fierce" – there were just over 60 applicants for the 42 available places.

The UEA receives the fees from the student, which it then disburses to CCN and KLM in proportion to their "delivery". CCN has 3-4 trainers at the airport, and another 10 at a city centre site. The IAA is located in a former WW2 hangar at the airport (formerly RAF Horsham St Faith), and Norfolk County

Jet engines on display in the lobby



Well appointed workshops





A workshop session

Council funded the 11m cost of its refurbishment, with a loan to be repaid over 30 years. The project was also aided by a £3.3m grant from the New Anglia Local Enterprise Partnership. An impressive internal design highlights the architectural heritage, whilst displays also play on the aviation heritage of the area, particularly the success of Boulton & Paul, the aircraft manufacturers who were based in Norwich.

There is a commendable outreach programme, funded by various agencies, with a (cringingly-entitled) “Pathway” programme for 8-14 year olds. This comprises visits from primary schools, and open days at the IAA with plenty of STEM activities, to encourage the children to make the right GCSE choices. This outreach activity is carried out by specialist staff recruited for their teaching backgrounds. Since the academy’s opening in April 2017, the programme has had an audience of 2000 children, including Air Cadets, Scouts and Brownies.

What of the future? Flight Despatch and Cabin Crew courses will start at Norwich this September. Pilot degree courses will start in September 2019, with an FTO yet to be disclosed. There is plenty of room for further study areas in the Norwich hangar. ASP intends to build another academy in Norfolk, at RAF Marham. This would not receive any RAF funding, and its creation will depend on the desire of the West Norfolk County Council. A similar academy is planned for Dundee in partnership with Tayside Aviation. The Whittle Engineering Academy will be located at Cosford. The Aaron Aviation Academy★ has recently started construction at RAF

Syerston: “the Aaron Academy will be a first of kind Academy in the UK. A joint venture between ASP and the RAF Air Cadets, it will provide integration of education, training and industry pathways for ASP’s six areas of aviation: pilot, air traffic, airport, operations, cabin crew and aviation engineering.” Although it is a JV with the RAF’s Air Cadets, there will be no flying activity (what does this say about the Air Cadets?); however ASP hope for involvement from local gliding clubs. (Indeed my gliding club has become involved at Norwich in providing air experience gliding at my home field).

The most recently announced project is an academy at St. Mawgan (or Newquay Airport, to give it its modern title). This will also focus on space. You can probably spot one of the patterns behind this overall development strategy – the IAA concept is a good way of improving skill

The B737 workhorse



levels in relatively disadvantaged regions.

Indeed the concept is an excellent way of melding the academic and the practical; for engineering careers to become a practical proposition for youths from as wide a demographic background as possible, it is highly attractive to be able to start earning immediately after graduation. The IAA should achieve this goal.

Company members will no doubt see that, whilst the ASP is a commercial organization, its ambitions have a high degree of overlap with our desire to encourage interest in and facilitate careers in aviation. Now if they could only forgo their fondness for 21stC educational and management buzzwords!

★ Named after Arthur Louis Aaron VC, DFM. He was born on 5 March 1922 and at school and university, he was a member of 319 Squadron, Air Training Corps in Broughton, Salford. Aaron subsequently trained as a pilot and flew 90 operational flying hours. He died on 13th August 1943 from wounds sustained while flying his 20th sortie for which he was posthumously awarded the Victoria Cross.

Company visit to Aerospace Bristol

By Liveryman Richard Model

Aerospace Bristol, having had a £19m injection for development, is a museum showcasing the massive contribution that Bristol has made to aviation. The majority of other museums display their exhibits from all aspects of worldwide aviation. However, Bristol Aerospace is all dedicated to the home-grown product, and quite an achievement it is. To many the star attraction will be the Concorde, G-BOAF, sitting in solitary splendour, in her own hanger. Having made its last flight in 2003 then left outside to rot, G-BOAF was rescued by a group of enthusiasts who have completely restored her to her former glory, allowing visitors to enter the hallowed, if tight, sanctuary. However that is only a part of this splendid collection as there are many other items of interest from an early public service tram to Skyland 12, which reported from space on the condition of the earth's atmosphere.

Past Master Chris Ford and 48 members of the Company, with their guests, visited the museum on the 27th June, a blisteringly hot summer's day. We were split into two groups for a conducted tour of the establishment. One could only sympathise with the enthusiastic young guides, Oliver and Tristan, who were somewhat overwhelmed by being faced with so many experienced intrepid aviators several with their long-suffering partners. Such questions as "Do any of you know anything about this aircraft?"; to which a quiet voice was heard to murmur, "A little, I flew the bloody thing". But they coped extremely well, knowing their subject and presenting it in an interesting and amusing manner.

The museum shows the important part played by Bristol in the development of aviation and weaponry during the last 108 years, containing not only aircraft but engines, weapons, flight simulators, and much scientific data making the whole event a very interactive experience

It was in 1910 that Sir George White, a local businessman and stockbroker, having seen the potential of aviation during a trip to a Paris Air Show announced that his company, The British

Tramways and Carriage Co. was about to branch out into aircraft manufacturing. They quickly built the first hanger and constructed a short grass runway on Filton Field. Over the next few years as larger aircraft were developed the runway was constantly being strengthened and enlarged. In 1949 it was finally lengthened to 8000 ft. This entailed the destruction and removal of a local village. Under name of the Bristol Aeroplane Company it was then able to facilitate the manufacture of the Bristol Brabazon, a massive propeller driven airliner which became known as 'the prettiest piece of scrap ever'. The wheels of the Brabazon are to be seen in the exhibition, giving some idea of the size of the aircraft and of course the runway was later very important in the development of the Concorde. It was also in 1949 that the Company teamed up with Ferranti to develop guided weapons, notably the Bloodhound 1 & 2, which entered service with the RAF in 1958 until 1963.

The airfield was sadly finally closed in December 2012 making way for yet another housing estate, the old control tower stands lonely and decaying amongst the returning weeds. Hasn't anyone explained that aircraft are more important than houses?

Bristol has been the birthplace of much of our nation's aeronautical history, developing and producing many famous aircraft. The first from Filton that was commercially successful was the Boxkite biplane, and then throughout the First World War, the BE2, which was partly designed by Geoffrey de Havilland. Between the wars came the Bulldog fighter, and then in the Second World War a succession of famous types: the Blenheim, in bomber and fighter roles; the Beaufort, a torpedo bomber; the Beaufighter, in fighter and maritime strike roles; the Buckingham, intended as a tactical bomber but which later served as a high-speed transport; and the Brigand, intended as a torpedo bomber successor to the Beaufighter, but which served post-war as a light bomber in Malaya and elsewhere.

The list goes on until such great aircraft as the Harrier, a most successful production of BAE Systems from 1967-2003, a stalwart of the British defence system on land and sea, serving on HMS Ark Royal and HMS Illustrious. Its abilities were also recognised by the Americans, achieving large sales to the United States Marines through McDonnell Douglas. The works at Bristol were also able to call upon much of Britain's engineering expertise and go on to produce such engines as the Mercury, the Pegasus, the Hercules and the Centaurus - it was eight of these Centaurus engines that powered the Brabazon.

After World War 2, when demand for military aircraft almost disappeared, the factory diversified into areas such as the Bristol car, which appeared in many versions, all luxurious and expensive. Also there was considerable development into the Space sector with a final contract from the European Space Agency for the Envisat, a satellite to measure the earth's resources and the ocean's topography. Now being used by both BAE Systems and Rolls Royce Aero engines, many of the facilities at Filton (including the Brabazon Hanger) are in use for the construction the wings for the Airbus 319 and military aircraft powerplants. Ever mindful that this is purely a museum showcasing aspects of Bristol's aerospace past, the museum has recently acquired a Bristol Freighter, which after undergoing restoration will go on display.

The museum is new, has started well and has a bright future. Many of the engineering feats mentioned are exhibited and it is well worth a visit from all the family.

Great Yarmouth Airshow

By the Editor. Photos by the Editor

The events at Shoreham have altered the British airshow scene for ever. One facet has been to make the location of land-based (for want of a better phrase) shows more problematic. The location issues are much eased by the choice of a coastal site. We all know the huge popularity of airshows with the public in Britain (and indeed around the world). So the increase in CAA licensing fees and overall regulation, has predictably choked the supply of airshows for the air-minded UK public. Hence it was interesting to see the authorities in Great Yarmouth launch a new show this year.

They were much inspired by the commercial success of the long-established Bournemouth show, which is thought to boost the local economy by c. £300m. Great Yarmouth, like many towns on Britain's East Coast, has been economically badly damaged by the

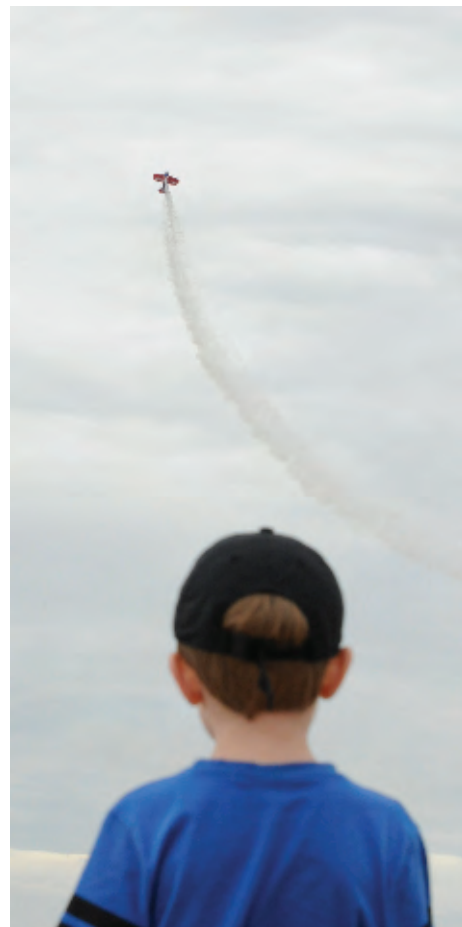
effects of the EU's Common Fisheries Policy. Support to North Sea oil fields, and burgeoning wind farms, are its main economic sustainers – apart from tourism (which provides c £0.6bn p.a. to the local economy). Interestingly the Council did not instigate the show directly, but delegated the task to the Greater Yarmouth Tourism & Business improvement area, led by local entrepreneur, Gareth Brown.

Brown and colleagues budgeted a cost of £650,000 for the show over two days of a weekend, which, like most coastal shows, was free to the public. Net revenues of £300,000 were anticipated, from an audience size of 175,000. This would provide a boost to the local economy of c £10m. In the event, good weather meant total attendance of 180,000, so one can safely conclude that the event met its commercial objectives.

Rich pushes his blood where it is not meant to go....



Two wars in one sky: the BBMF with the Great War Display Team as a backdrop



Rich Goodwin's Pitts S2S inspires the next generation



Peter Davis takes a hands-off approach to piloting – note a red glove on the left hand, and green on the right!

The Blades doing a vertical split

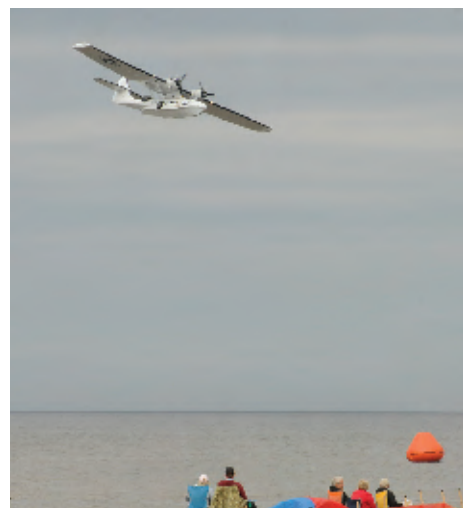


The Reds arrive in traditional style

The accompanying photos give some flavour of the flying component. If one were to offer advice, and what editor doesn't?, this show, with its backdrop of big North Sea skies, is ideally suited to some military heavy metal. Dutch, Danish, or German fighters would have made a great spectacle, (and would enjoy short transit times) so some heavyweight military networking might be in order before putting the 2019 schedule to bed.

In the air there was a surprisingly entertaining display from Peter Davis in his Calidus autogyro – he must have explored every nook and cranny in that machines envelope! And it was highly appropriate to see a Catalina cruise sedately around such a maritime setting.

On the ground there were the expected stands. A somewhat despondent group of Air Cadet officers lamented that it was now more than 5 years since they had been able to offer their cadets any gliding. However a £650,000 spend on new infrastructure at former RAF Swanton Morley (now Robertson Barracks), should enable the re-establishment of a VGS by this Autumn. ULAS, our affiliated unit, had several student members in attendance in growbags waving their metaphorical flag. I wish the Great Yarmouth Airshow a long and successful future.



Plane Sailing's Catalina

RAF 100 parade and flypast

By the Editor. Photos by the Editor & MOD

The Master, Wardens, and assorted Company hierarchy seemed to have been well dispersed in high rises around Central London on July 10th, and indeed one or two were in the VIP grandstand opposite Buckingham Palace. Your editor was with the hoi polloi on the Mall, and it was interesting to see the level of enthusiasm of those around me. Some overseas tourists were there of course just for a free show, and some British pageantry – I am sure they were not disappointed. But the level of empathy for Britain's RAF, and the armed forces in general, seemed almost tangible. As Johnny Mercer MP (former Captain in 29th Commando, Royal Artillery) said in the context of this edition's cover photo "let no one say there are no votes in defence". The date of July 10th was chosen in order to provide the chance of better weather than April 1 itself, and also was 100 days after the RAF's actual birthday.

As for the flypast, its organisation must have been extensive, yet one sensed a degree of more risk aversion than days of yore. The stream of c100 aircraft took, as planned, more than 9 minutes to pass. Whilst one can understand the need for reasonable buffers between the three main components operating at different IAS, gaps between sub-elements looked rather conservative – the Hawk T1 and T2 elements could, for example, have been amalgamated, for greater visual



The RAF Band in full flow



Squadron Standards



The Pipe Major puts his foot in it

A bit early with the blue, Hoskins!



effect. It was somewhat surprising that the Air Mobility Force could only muster 2 C130s. Overall the RAF's engineers must have done a fantastic job in ensuring serviceability: a particular success was in getting 3 F35Bs into the air. Such was the doubt about this beforehand that the RAF's Plan B was to have a solo F35B accompanied by 2 Tornado GR4s. In the event these tacked themselves onto the back of the main Tornado formation.

However the stars of the show were the 22 Typhoons spelling out a perfect "100". This, not easy, formation had been honed in secret in preceding weeks over the North Sea playground of the Lossiemouth and Coningsby fleets. It was very impressive.

The RAF's bands were on top form, even the drill was good. For many people the air in the Mall that day was surprisingly dusty....



The BBMF overfly the palace



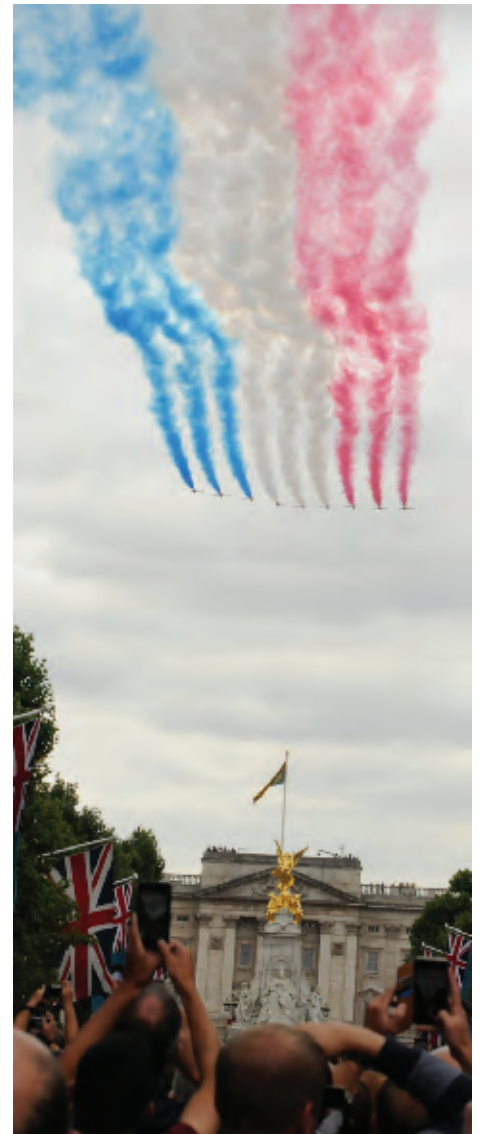
The A400M and its heavy colleagues approach Admiralty Arch



The view from above



The impressive Typhoons



Properly coloured above the Palace



A visit to the National Maritime Operations Centre at Fareham and the Search & Rescue helicopter base at Lee-on-Solent - 21st June 2018

By Upper Freeman Andy Richardson. Photos by Gary Bickerton, Goff Moore and Peter Barker.

With the transition now complete of the combined UK SAR resources of RAF, Navy and Coastguard to a unified operation run by the NMOC, it seemed a very appropriate time for the Honourable Company to plan a visit and see how the new organisation is running. All the UK SAR helicopter bases are now operated by Bristow Helicopters, through a commercial contract on behalf of the NMOC. Thus, following a meeting with Russ Torbet, Bristow's Director of UK SAR, it was decided to schedule the visit at Lee-on-Solent, so we could at the same time also visit the NMOC at Fareham as well as seeing an SAR base in operation.

So, on a bright and sunny Thursday 21st June, 41 Honourable Company members (14 actually flying in) gathered at the UK Search and Rescue Helicopter base at Lee-on-Solent for a briefing on UK SAR with a demonstration by the local AgustaWestland – now Leonardo, AW 189. With hindsight (isn't that a wonderful asset?) I should maybe have kept the numbers lower but after discussion with our hosts we decided to accommodate all 41 members who had applied for the visit.

Upon arrival we split into 2 groups, with the first group car sharing and transferring up the road under the watchful eye of Past Master

Chris Ford, to the National Maritime Operation Centre where they were met by John Foster, the MNOC Air Commander.

The second group with yours truly were welcomed by senior pilot Jason Davies, who gave an excellent briefing on the history of UK SAR, and how it has evolved to its current state. It was interesting to learn how the SAR helicopter units work with the rest of the SAR organisation. To cover the 10,500 miles of coastline there are some 401 Coastguard Rescue teams, the RNLI, Police, Ambulance, Mountain Rescue, and the SAR Helicopter units. The SAR Helicopter units operate 365 days a year 24 hours a day with helicopters on 15 minutes readiness by day but usually airborne in half that time.



To fulfil its role, Bristow operate a fleet of Sikorsky S92 and Leonard AW 189. The Lee-on-Solent base operates the AW 189.

The AW 189 is truly a state-of-the-art machine. In the SAR role with a MTOW of 18,960 lbs, it has a crew of 4 (2 pilots, with operator and winchman-cum-paramedic). Radius of action is 200 nm; endurance is



over 4 hours and it has a rescue capacity of up to 16 persons. VNE is 167 kts, with a cruise speed of c120 kts. Power comes from 2 x GE CT7-201 turboshaft engines.

The 189 cockpit is a dream. An advanced open architecture avionics suite, fully digital glass cockpit, advanced situation awareness. Autopilot of course enables automated search patterns and auto hover with winch operator trim. It has FLIR and a night vision imaging system. It has a twin rescue hoist; overall it is

probably true to say, you will not find a better equipped SAR helicopter anywhere – small wonder that the crews love it.

After our briefing we had ample hangar time to climb aboard and examine it for ourselves and then outside to see a





training exercise with the Coastguard. We were then rejoined by the NMOC group and enjoyed a buffet lunch together. It was time to swap over and that's when my plan fell apart. To my horror, with so many having flown in, I discovered we were short of enough car seats to get the morning group to NMOC. The situation was kindly resolved by Paul Nicholas in allowing John Davy to borrow his very fine car.

Our host at NMOC was John Foster, the Air Commander. The NMOC would probably be the first to admit that their location on an industrial estate without sight of the sea is not an obvious choice but their facility is modern and very impressive. We were taken to an upper

floor conference room which had a full-length glass window overlooking the permanently active operations centre. At a glance, the duty controller can see everything that is going on and see the status / availability of resources to respond to any incident. It is here that every UK Coastguard activity is monitored. Their monitoring process is also global. If you (hopefully inadvertently) set off your emergency transponder – they would know about it.

Follow up from members was that this had been a thoroughly informative, enjoyable and entertaining day. Thanks again to Bristow Helicopters and the Lee-on-Solent SAR flight and to the NMOC.



Summer Supper - Monday 16th July 2018

By **Liveryman John Davy**

The eighth summer supper, once more arranged by Past Master Chris Ford, took place at Cutlers' Hall during the evening of Monday 16th July. It had been planned for Watermen's Hall, but the number asking to attend (90), outgrew the capacity, so a decision was made to move to Cutlers' Hall. And a great time was had by all.

Proceedings began with Chris bidding us all Good Evening, and extending a warm welcome to members and their guests. After pointing out the "escape routes" to be used (whilst grabbing a charged glass, of course) in the event of an incident (see picture), we were introduced to Erika Gundersen, a charming pianist who was to entertain us beautifully during the



evening. Warden Nick Goodwin said Grace, and the Beadle, David Hasler,

ensured that the food was served on time, in some quantity and was delicious. The wine flowed too.

Following a rendering of Happy Birthday to celebrate Paul Nicholas's 81st and, of course, the Loyal Toast, there was a short intermission during which we were given a dramatic display by the Beadle and his accomplices of the reason behind the ritual of the Loving Cup. (No real knives were used and no performer suffered any injury).

Carriages were all too soon at 1030, and a very happy crowd thanked Chris, and would have signed up for next year's Summer Supper, on the 15th July at the Stationers' Hall there and then if the flyer was available!

Visit to RAF Linton on Ouse, 13th June

By Freeman Alexander Quessy

Several company members flew into Linton from various civilian airfields around the UK. Fellow Freeman Ian Martin-Taylor offered me a seat in his syndicate-owned Piper Archer, based at Wycombe Air Park. Our departure from Wycombe saw us departing into some heavy nimbostratus at 500ft AGL. However after being stuck down low due to the London TMA we were able to climb once over Nottingham and get on top. After clearing Doncaster's zone we were handed over to Linton control who were kind enough to provide us with a radar vectored ILS. Once we landed at Linton the weather seemed to suddenly clear, later giving way to a glorious summer afternoon.

Upon arrival we were given a warm welcome by Nick who would be our guide for our stay at the station. We were then taken to our rooms in the Officers' Mess for those company members who were staying the night. After dinner in the mess and a couple of drinks in the bar we met with the rest of the company members the following morning.

The first stop was to Linton's new tower:

Linton is surrounded by many diverse airspace users with heavy aircraft from Doncaster in the South, and a high glider density from all around. ATC carefully manages all this traffic providing a range of services in order to ensure safe operation for all the local airspace users. The station also provides assistance more explicitly useful for pilot training such as an instructor in the tower to help out aircraft with any trouble and advise the controllers of any Tucano-specific problems.

We then visited one of the hangars to get up close to the Tucano. We met with recent graduates of the Tucano course who filled us in on the syllabus – low-level nav, formation flying and aerobatics in the Tucano are all exciting activities I am sure. The Shorts Tucano aircraft is a single-engined turboprop aircraft used to provide a bridging course after completing Elementary Flying Training on the Grob Tutor and the fighter lead-in course on the Hawk at RAF Valley.

Finally we visited the base's memorial room where we were given a tour by Alan Worby, a retired QFI. The archive

includes details of Linton aircrew who lost their lives serving in the Second World War. The airbase was one of the first bomber stations to be fitted with a hard runway and was home to No 6 Sqn RCAF operating the Handley Page Halifax. After the war the station became a fighter base operating the Canadair Sabre, Hawker Hunter and Gloster Meteor. Then in 1957 the base was refitted and No. 1 Flying Training School moved in with the Jet Provost aircraft which were retired during 1993, and was replaced by the Tucano. The Tucano is to be retired in late 2019 and replaced by the Texan II which will be based at RAF Valley. Whilst the future of Linton is unclear the base will remain fully operational for the foreseeable future.

We were greeted by the station commander, Gp Capt Keith Taylor, at the end of the visit who thanked the company for our donation. After saying our goodbyes it was time to leave. We were lucky enough to be departing in between the Tucano flying schedule and had a great view of the aircraft landing and departing from the hold.

The University of London Air Squadron

By the Editor, photos by the Editor

There are 15 University Air Squadrons in all, some being co-located with rivals. The University of London Air Squadron (ULAS), is our chosen affiliated UAS, and shares a base at RAF Wittering with Cambridge UAS, as well of course with several other flying units. All operate the Grob G115 Tutor – mainstay of the UAS world, and indeed the RAF's Elementary Flying Training since 1999. All the UAS operate under 6 FTS, which is also headquartered at Wittering, on the boundary of Cambridgeshire and Northamptonshire, but just to complicate matters the station also houses 16 Sqn, which is within 3 FTS. Slightly bizarrely, Wittering now has

pride of place as the RAF's busiest UK station, with 20 aircraft on the pan, each flying typically 3 sorties per day. Note to readers – avoid Wittering if you can, as white Tutors are difficult to see (ATC does of course provide a radar service well beyond their MATZ).

But back to the University of London



RAF Wittering with a pan full of Tutors

Air Squadron, now 83 years old: it is a bit of a misnomer since students at 19 tertiary educational establishments can



Students Jack Heyburn and Alex Gibson-Stark



Familiarisation with checks on the cockpit simulator

now join. The consolidation of UASs, and the proliferation of universities, means that ULAS caters for undergraduates from as far afield as Hertford in the North, to Canterbury (the University of Kent) in the South East. This creates obvious physical difficulties: a Kent student faces a 2.5 hour journey each way to attend a 'Town HQ' training evening (a test of commitment if ever there was one). Since the squadron's renowned Town HQ in Kensington was ripped away under a defence spending axe a few years ago, the Town HQ is now at RAF Northolt (where students have their own bar). They are also able to attend a few of the station's dining-in nights. Attendance at training evenings – which run from September through till Easter, in term time – is mandatory, and attracts a variety of guest speakers, as well as more

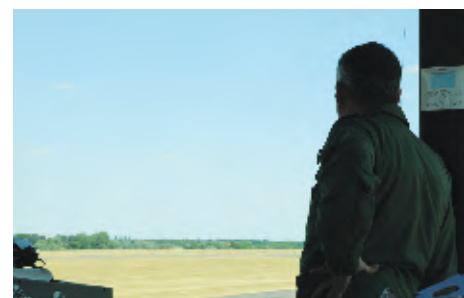
straightforward instruction and mass briefings.

Northolt is the also base of the unit's Adjutant and the Ground Training Instructor; the latter is Sgt Kahmeel Spence, a PTI, who looks after, inter alia, Adventure Training for the students. AT is a much greater feature of UAS life these days in comparison with that enjoyed by many Company members, who would have had the benefit of a lot more flying. Indeed one current ULAS student is already a member of the British junior luge team (I doubt she will have any problems with G tolerance in aeros then)! Like Cambridge UAS, ULAS has had a fairly peripatetic existence and only moved to Wittering (100 miles North of London) in 2015. ULAS is the biggest of all university air squadrons with 75

members (it has a maximum possible establishment of 90 students). Of these 35 are in their first year (which may not correspond to their academic year); numbers tail off each year. Nowadays students have to apply to extend into their third year of membership. Some 4 students each year sign up to commit to the RAF, and undertake a week-long attestation course prior to becoming Acting Pilot Officers. The bulk of the squadron is therefore composed of Officer Cadets. In addition some 4-5 Officer Cadets apply direct to Cranwell, so ULAS is sending some 8-10 students p.a. to the 'College of Knowledge'.

In the view of the current ULAS Boss, Sqn Ldr Ken McCann, the RAF believes it obtains good value from the UAS system: some 37% of entrants to Initial Officer Training at Cranwell last year were former UAS members. Moreover the RAF can have greater confidence in the future of such students since they have been under the scrutiny (and tender pastoral care) of serving officers for 2-3 years. Ken may be better known to some Company members as Air Cdre McCann, but has taken on the OC role at ULAS as a temporary measure as a FTRS officer. Indeed Ken is a shining example of the benefits of the FTRS scheme for retaining the skills and wisdom of 'mature' officers, whilst providing them with a chance to remain airborne, should they so wish. There is little doubt in my mind that Ken enjoys the pastoral elements of his role, as much as the flying.

What of the flying, you might ask? In addition to the Boss, the instructional team comprises CFI Flt Lt Hamish Coles-Hendry, who comes from a RN (shock, horror) rotary career, and QFI Flt Lt Nick Wesley (Tornados, later Hawk QFI). There are also 3 FTRS QFIs on call. Because of the reduction in instructional hours available for each student (compared to the levels enjoyed



The Boss as nonchalant as possible watching a solo student in the circuit

by the Editor, and many other Company members), most flying is concentrated into so-called PIFTs (Periods of Intense Flying Training). These are held over 4 weeks at Easter, and 12 weeks of Summer, with 8-9 students attending each week. Students will typically leave the UAS for Cranwell with c 30 hours, the bulk of which will have been obtained on PIFTs. Maintaining currency and the impetus of learning is clearly problematic in term-time with so few hours available.

Progress, as ever, varies greatly between students. Whilst the syllabus has been ‘detuned’ a little from my era, one ULAS star has recently managed to move to basic I/F instruction by the end of his first year. If the student progresses as far as the solo nav trip, he/she wins his Budgie Wings (the Primary Flying Badge). After that a taste of formation, and low level nav is on offer, but only one ULAS student has progressed this far this year. Solo flying has been de-emphasised a touch – of the 30 hours on leaving of the average student only 3 or so will be with a vacant left hand seat. Achieving a first solo remains



The ULAS corner of the crew room with attempts at studiousness

of course a key achievement. Solo flying at Wittering had a little hiatus earlier this year due to manning issues within ATC on the field, but these have now been resolved.

All UAS flying training takes place on weekdays – the (pooled) airframes are used by the AEFs at Wittering at weekends. Despite the resulting high utilisation, Ken McCann avers that



Sqn Ldr McCann regains his seat after a successful solo sortie by Officer Cadet Alex Gibson-Stark



The Tutor round-dial cockpit

serviceability (courtesy of Babcock) remains very good.

What of the future? The Grob 120TP Prefect is currently replacing the Tutor in the EFT role, which will liberate Tutor airframes for the sole use of UASs and Air Experience Flights. Although the Prefect is better suited to developing the next generation of front line pilots in that it has a glass cockpit, some members of the Honourable Company might question the need for having a 456 hp turbo prop

for initial flying grading and training, and also procuring only 23 airframes (via a contractor). This seems particularly odd given that there is a total of 60 Hawk T2s for further up the training pipeline!

Ken McCann is scheduled to retire at the end of this year, and he hopes the ULAS establishment will by then receive an additional QFI. ULAS and its neighbour Cambridge UAS will shortly each receive their first RPAS operator student. These ‘Gameboy Warriors’ will receive basic



Tutors and the infamous Harrier ‘ski jump’ at Wittering

flying training after their IOT. The Tutor is scheduled to remain the mount of UASs “for the foreseeable future”. Although it will be interesting to observe whether, after a year or two of Prefect experience, CFS judges if all glass cockpit training is best. My guess is that the good availability of Tutor airframes with good remaining service life, will be the overriding factor! AVM Gary Waterfall (currently Chief of Operations at PJHQ) has recently been made a ‘Mentor’ of the squadron, so with friends in those sort of high places (not to mention the Honourable Company in the background), ULAS should flourish for some while yet.