

AirPilot

JUNE 2018 ISSUE 27







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

Incorporated by Royal Charter. A Livery Company of the City of London.

PUBLISHED BY:

The Honourable Company of Air Pilots, Dowgate Hill House, 14-16 Dowgate Hill, London EC4R 2SU.

EDITOR:

Paul Smiddy BA (Econ), FCA EMAIL: editor@airpilots.org

FUNCTION PHOTOGRAPHY: Gerald Sharp Photography View images and order prints on-line. TELEPHONE: 020 8599 5070 EMAIL: info@sharpphoto.co.uk WEBSITE: www.sharpphoto.co.uk

PRINTED BY:

Printed Solutions Ltd 01494 478870

Except where specifically stated, none of the material in this issue is to be taken as expressing the opinion of the Court of the Company.

EDITORIAL CONTRIBUTIONS: The copy deadline for the August 2018 edition of Air Pilot is 1 July 2018. The address is:

14-16 Dowgate Hill House, London EC4R 2SU. Our telephone number remains unchanged

> Telephone: 020 7404 4032 EMAIL: office@airpilots.org WEBSITE: www.airpilots.org

JUNE 2018

14th	General Purposes & Finance Committee	Cutlers' Hall
25th	Election of Sheriffs	Guildhall
28th	T&A Committee	Dowgate Hill House

JULY 2018

12th	Benevolent Fund	Dowgate Hill House
12th	ACEC	Dowgate Hill House
16th	Summer Supper	Watermen's Hall
16th	Instructors' Working Group	Dowgate Hill House
19th	General Purposes & Finance Committee	Dowgate Hill House
19th	Court	Cutlers' Hall

VISITS PROGRAMME

Please see the flyers accompanying this issue of Air Pilot or contact Liveryman David Curgenven 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: CAS ACM Sir Stephen Hillier giving the keynote address at the City Livery RAF 100 Banquet.

A message from your Editor...

The chair in which I carry out my editorial duties is a Martin Baker example – new and unused, and destined for a rear-seater in a Nimrod MRA4. Its cost appealed to my innate Yorkshireman, its MB engineering appealed to my appreciation of fine engineering. And if it is good enough to cosset a crewman on an eight hour mission, it is good enough for a couple of hours at the editorial PC.

In this issue we celebrate the RAF centenary – a once in a lifetime opportunity to look back on the greatness of our junior service with pride, and to look forward to its next century – with difficulty. Aviation and the pace of technological change, not to mention the shifting geopolitical arena, make forecasting a thankless task. The joint Livery Companies Centenary dinner at the Guildhall was a splendid occasion, and I



report on it fully in this issue. Tony Edwards, the Master Coachmaker, in his speech made some trenchant comments on the need for increased defence spending. Indeed we (that is sentient taxpayers in Western democracies) have much for which to thank the Russian President. His now stereotypical aggression, often under false flags, has made the case for NATO budget increases far better than any Western politician could.

In a previous life I was what was unaffectionately known as a "teenage scribbler", and ironically called thus as I cruised past middle age. A large part of my role was in evaluating board strategies, and the effectiveness and skills of board executives. The Guildhall event was full of retired and serving very senior officers – those charged with delivering defence. Some no doubt have been or are involved in defence procurement. Also present were a handful of senior figures from the defence industry – the providers of software and hardware. Noticeably absent from the occasion, I believe, were MoD mandarins on the procurement side.

Once one has been involved in the RAF, even as a young Air Cadet, the service is magically absorbed into one's DNA, until one's last day on earth. So many Company members will no doubt be sensitive about poor procurement decisions made in past decades. Political cycles have a nasty habit of over-ruling common sense. And inflation in defence products magically transcends almost every other category in the economy. Both take the procurement trade from difficult to very challenging. And then we have left-field encumbrances such as Gordon Brown's porkbarrel politics leaving a legacy lasting decades. Mark Sedwill (the UK's National Security Advisor) recently admitted that the UK will never deploy its carriers into contested waters with a sovereign strike group.

So no one can envy those charged with providing – literally – the most bangs for the taxpayer's buck. And I hope that many of us would echo Tony Edward's wish for a quantum increase in the UK's defence spending. But with teenage scribbling tendencies yet to be rendered inert, I pray for more effectiveness in the spending of any extra funds, and a more long-term view being taken. The editorial chair is a constant reminder of UK procurement weakness.

Now if I can just persuade my wife that a TSR2 nosecone would make the perfect garden ornament....

Paul Smiddy - Editor





Contents

News Round Up4
Brize/Oxford Airspace Consultations
The Master's Message
From the Desk of the DAA8
The Foundling Museum and Gazette9
The City Livery Banquet
The Cobham Lecture
RAF 100 Flypast
The Livery Dinner
Thanksgiving Service & Parade at Bury St Edmunds
Young Aviators Dinner
The North American Region's Annual Visit to Canadian Forces Base Comox, British Columbia
Visit to City of London Distillery
Lunch Club
STEM Collaboration with the Science Musuem
Book Review







News Round Up

THE COMPANY ON FACEBOOK

(by the Hon Media Consultant, Ben Griffiths)

Love it or loathe it, social media is here to stay. It is now impossible to spot anyone born between about 1950 and the turn of the century who doesn't have a smart phone, with a large proportion of those regularly using the internet to stay in touch.

What this means for organisations and businesses both large and small is that social media has become an important means to communicate with customers or members.

A key part of the 2017 Strategic Review determined that the Honourable Company needed to improve and develop external communications as well as with members. The launch of a Twitter page to keep members and those interested in Company activities, such as the annual flying scholarships, has been successful and we are reaching new audiences.

One way to improve the speed of communication within the Company is to establish a 'closed' group on Facebook. This is restricted to 'members only' with requests to join the group vetted by the administrator (me) in consultation with the official list of members.

With more than 2.2billion active members around the world, making it arguably the largest and most powerful social network, Facebook is also a good place to showcase the work of the Air Pilots and we will begin this activity in due course.

For now, if you are a Facebook user, I'd urge you to look up our group using the search function in the Facebook homepage and request to join. As we grow the membership we intend to post exclusive content, provoke debate among members and act as a forum for wider discussion, generating ideas and sharing important content such as documents and photographs.

One thing the group will not be is a forum for aircraft spotters. Many of us enjoy photographing aircraft and sharing pictures but there are ample pages to do this already. The group will be designed for Air Pilots but will only be successful if we have a good level of engagement.

Let's not ignore the elephant in the room. Facebook has been dragged into debate around privacy and what data digital companies hold on their members and how this information is used.

We believe that, as with every activity that requires the submission of your personal data to a website, it is wise to exercise caution. Ensure that you never post so much information publicly that somebody could piece together your identity if they so desired. Many people choose to use a false date of birth, for example.

To reiterate, the Air Pilots closed group will be restricted to paid-up members and so will hold no more information on you than is already collected for the membership database.

We will use the page for disseminating information—quickly, organising committees and publicising events. It can also be useful for networking e.g. sourcing an expert or aircraft part and offering members exclusive content such as behind-the-scenes videos from airfield visits or reports by our Director of Aviation Affairs.

I'd urge you to request membership of the group when you have chance and together we can build an interesting and valuable presence on Facebook. This is what the site was originally intended to do – connect likeminded people – and I'm convinced we can use it to best effect.

LONDON AIRPORTS

The editorial in the April edition mentioning the ownership structure of Heathrow prompted a fulsome letter from Freeman Michael Brookes. He judges that the owners of Gatwick are "on a tax-avoidance journey second to none." It is wholly owned by foreign pension schemes and sovereign wealth funds. Michael set out the byzantine

ownership structure in some detail, the only purpose of which he adjudges is to minimise any liability to UK corporation tax.



AFFILIATION WITH HMS PRINCE OF WALES

The Master and the Clerk, together with Past Master Tudor Owen and Assistant Cdre Chris Palmer, recently met with Capt Ian Groom and Cdr Mark Kingdom of HMS Prince of Wales (PWLS) to mark the official affiliation between the Company and the Ship - the sister ship of the Royal Navy's latest and largest aircraft carrier, HMS Queen Elizabeth.

Capt Groom is the Senior Naval Officer for PWLS. He is the Marine Engineering officer who is in command during the building of the ship, after which he hands over to the first Commanding Officer, Capt Steve Moorhouse. Cdr Kingdom is the ship's Air Engineering officer. Cdr Philip Richardson, who is the designated Commander Air (or 'Wings'), will join the ship next year.

During an informal lunch, appropriate ways to mark the significant affiliation were discussed, as well as other means (visits etc) by which to develop and maintain closer ties between Ship and Company. The photo shows Capt Groom presenting the ship's plaque to the Master; Capt Groom was likewise presented with an Air Pilots plaque for display onboard HMS Prince of Wales.

GULF SCHOLARSHIP

Liveryman Alia Twal writes that the Airways Aviation Academy has become a



Hanane Chabana

lifetime sponsor for the Arabian Section of the Ninety Nines, (the US founded association of women flyers) and recently launched a joint scholarship program with the Arabian Ninety Nines to jointly screen, and sponsor, female student pilots. The first to benefit from this scholarship is Hanane Chabana who is currently training at Airways in Oxford, UK.

NATIONAL SECURITY ASSESSMENT OF SERIOUS CRIME

The annual assessment was recently published. A section dealt with Vulnerabilities at the UK Border. It contained two paragraphs of relevance to us.

General Aviation (GA) (para 82)

The UK has over 3,000 airstrips, presenting opportunities for criminals to use GA to exploit the UK border. Intelligence demonstrates that OCGs (Organised Crime Groups) have made significant investments in the purchase or hire of aircraft to facilitate illegal movement of people and commodities. It is highly likely that OCGs will continue to use GA in order to facilitate the illegal entry of migrants, in particular, into the UK.

Air Facilitation (para 183)

Air facilitated migration remains a major threat to the integrity of the UK border, although there are far fewer detections of irregular migrants arriving in the UK via this method than is the case with clandestine entry. Air facilitated migration is necessarily more reliant on OCGs than clandestine migration: a clear route (and potentially false, fraudulently obtained, or illegally modified documents) would be required to enter the UK in this way, thus increasing the cost and limiting the likely market.

Pilots who see any suspicious activity in the air, or on airfields, should report it to the Border Force via 101.

THIS YEAR'S GARDEN PARTY

The Master states: "We really need expressions of interest for the Summer Garden Party at Highclere Castle on September 9th as soon as possible please, since an early idea of likely numbers will dictate the size of the marquee that we order. A flyer will be enclosed with the magazine with a cut-off date of 9th August, but I would earnestly ask that members respond by email to visits@airpilots.org asap."

HEMS VISIT

Photos by Ian Davies





Recently a group of members were again hosted by the London Air Ambulance at the London Hospital, Whitechapel.

DUXFORD AIR SAFETY DAY

The Editor attended this event in April, and would strongly recommend such events to GA pilots. An excellent and humorous presentation by Flt Sgt Paul Buttolph of the D&D cell at Swanwick started the proceedings. This unit will receive new equipment and a new room in 2020, after which they will take executive control of all emergencies in UK airspace. He outlined the high degree of effort expended by the unit's staff in overdue and tracing action.

Andy Amor, the NATS representative, outlined how the new system for prenotification of controlled airspace transits by VFR traffic was progressing well. To date 185 requests had been received, of which 90% were approved. The topic of

capacity constraint in the London TMA and its runways was covered at length - "we get more economical use of concrete than anywhere else in the world", with more than 3000 flights per day from London's 6 runways.

Rob Gratton of the CAA unsurprisingly focussed his attention on airspace infringements. Analysis of 2017 data showed 70% were lateral into CAS, 30% vertical, and 97 (9%) were ATZ infringements, with Barton Fleetlands sharing the dubious honour of being top of the league table. There were 81 incursions into Danger Areas; and several displays were disrupted by ignorant pilots (including the Reds at Goodwood and Flying Legends, and the Blades at Bournemouth). 75% of incursions were caused by pilots not using a GPS or nav tool such as SkyDemon. Corrective action now of course includes miscreants asked to do an online test, and a short course. Of 307 events examined by the Infringement Coordination group, only one resulted in a prosecution.

MEMBER'S PHOTOS

Freeman Lt Matthew Winwood recently sent the very interesting photo below. He says "There are two abandoned Iraqi Airways 747s at Tozeur, which used to belong to Saddam Hussein. He left them there for safety in 1991, and funnily enough, hasn't popped back to collect them since."



Liveryman Alan Robinson writes: (25 years before a recent anniversary) "Andy Bascombe and I were privileged to fly a 747 in formation with the Reds over Lincoln Cathedral on 16th May 1993 to mark the 50th anniversary of the Dam Busters raid."

Photo taken by Sergeant Rick Brewell, RAF



Brize/Oxford Airspace Consultations

The Editor writes: following Steve Slater's article in the last issue, in which he set out the LAA's grounds for despondency (or should that be despair?) about postulated increases in controlled airspace in the Oxford area, I thought it would be useful to reproduce our DAA's submission on the matter. This is shown below:

Brize Norton & Oxford Airspace:

Each airfield proposes major increases in Class D airspace on the grounds of safety. Each supporting case is seriously flawed - e.g. quoting an airmiss 30 nm from the airfields as a reason to expand their controlled airspace - and fails to account for the increased risks their plans create for GA. Since responses to both are similar, only the extensive response to Brize Norton, which demonstrates the need to balance the requirements of all airspace users, is shown:

"The Honourable Company of Air Pilots objects to the chosen option in RAF Brize Norton Consultation - Airspace Change Proposal ref 70751 029 Issue 1 dated 15th December 2017.

The Company recognises the desire for a known ATC environment within which to operate RAF military transports safely but believes the consultation's preferred option of expanding Class D airspace needs to be reconsidered in the wider context of all users of UK airspace. Specific observations on the consultation document include the following:

- Para 3.3 Driver for Change suggests that large aircraft are unsafe if they are outside controlled airspace (Class D); this pre-supposes a solution whereas the actual requirement is that they remain within a 'known ATC environment.'
- Para 3.3.1 mentions GA infringements posing a threat and increasing Brize Norton ATCO workload. Infringements will be an increasing issue if GA are driven into ever-tighter funnels round the periphery of controlled airspace because they are unable to expect or obtain timely crossing clearance/coordination. This proposal moves the problem, it does not resolve it.

- Fig 2 shows that existing measures already have an impact and there is no mention is made of those. It is premature to seek major change without understanding the full scale of improvement as these and the CAA's Airspace Infringement campaign measures will achieve, especially when that change could disadvantage significantly other airspace users.
- 3.4 says one driver for enlarging the current Class D airspace is to live accommodate (rather simulator) training in pilot-interpreted procedures. The Air Pilots does not challenge the benefit of live training but notes first that that the world's airlines and civil regulators find simulator training is adequate for pilot practice (and testing) in pilotinterpreted procedures. We also question whether repeated practice at home base would achieve the training aim stated or whether using other aerodromes might provide a more diverse and challenging training opportunity. The relevance of war zone operations to the pilot skills required to fly pilot-interpreted approach is not explained; more varied live or simulator training, especially the latter where battle damage can be injected into the training, might be more beneficial.
- Annex A3 over-states data on STAR/SID deviation because it does not differentiate between airspacerelated deviations and others. Therefore, the case for change is weaker than the document suggests.
- Similarly, Annex 5 over-states the data on Airprox; e.g. a Tornado/Merlin Airprox over 17nm NW of Brize on LARS frequency would not have been prevented by extending the CTR. Therefore, the case for change is weaker than the document suggests.

We do not believe the need to increase Class D volume and disadvantage significantly non-Brize Norton air traffic is proven. Even if it were, it could not be deemed acceptable without a guarantee of an increased controlling authority ATCO complement and daily manning sufficient so that other users could be coordinated and maintain access as at present.

The Honourable Company of Air Pilots is in favour of measures that increase overall safety that are proportionate and equitable, i.e. they recognise the needs of all users rather than just one component. We believe the proposal to establish a large swath of Class D airspace rather than a more comprehensive assessment and consideration of alternatives such as RMZ/TMZ is not supported by the evidence provided and is premature, especially as it is matched with a London Oxford Airport proposal to establish a swathe of adjoining new Class D airspace. Amongst alternatives, a RMZ/TMZ solution offers the potential to avoid compressing GA aircraft into evertighter choke points and increases the safety of all users by providing the known environment' that RAF Brize Norton was seeking.

Exclusion of others has been the traditional UK approach to resolving potential air traffic conflicts but it is not a viable long term solution, especially in areas of high demand and when new players — e.g. un-manned air vehicles — are demanding access. Therefore, future airspace changes must be designed to enable safe access for all users and not to prioritise one sector to the exclusion of others."

The Master's Message

By Captain Colin Cox

As you read this I will have been in post for about twelve weeks. In that time I will have attended nine dinners, six lunches, witnessed the decommisioning of one warship and affiliated with another, as well as chairing various meetings and sitting in on others in an ex-officio capacity. Coupled with writing speeches and articles such as this, I'm discovering that the position of Master is almost a full-time job in itself. They say that one is as busy in retirement anyway as they were when they were working, but this really is one level up.

None of this should have come as any great surprise to me as I could have cut and pasted previous Masters' Messages from back copies of Air Pilot. Well, maybe not the bit about the warships – those events were a special treat. Another special treat this year is that I happen to be Master during the year that the RAF are celebrating the 100th Anniversary of its formation as the world's first independent air force.

These celebrations kicked off on Sunday 1st April with the annual commemorative service at the RAF's spiritual home of St Clement Danes Church. With this being the 100th Anniversary, it goes without saying that this really was a rather special event with a reception after the church service being held at the Royal Courts of Justice. As if this wasn't enough by way of 'special event' our Company was invited to cohost a one-off grand banquet at Guildhall as the City Liveries tribute to the Royal Air Force. This was done in conjunction with the Worshipful Companies of Coachmakers and that of Engineers, with the Banquet being held on Friday 20th April after a reception for 1,000 people in the Guildhall's Great Hall the evening before. It was only right that Master Elect and his wife should attend the reception on my behalf, having served in the RAF with distinction for many years. If truth were known, I needed the evening off anyway after all my exertions leading up to this event. On the night, it was my privilege to present to the Chief of the Air Staff, Sir Stephen Hillier, a specially commissioned sword handed to me by

Past Master Robert Pooley on behalf of our Honourable Company to celebrate the occasion and serve as a tangible reminder of our long-standing association with the Royal Air Force.

Traditionally, with the date of our AGM falling when it does, more often than not it is shortly followed by the Lord Mayor's Banquet for the Masters of Livery Companies at Mansion House. Different Livery Companies hold their Court Installations at different times of the year so it's entirely possible that, at one extreme, a Master could be coming to the end of his/her year whilst at the other extreme, one can only have been in position for a few days, a situation I found myself in, as so many others have before me. So the new boy was found to be consulting Debrett's Handbook on social etiquette and how to address the landed gentry and civic dignitaries. With the splendidly colourful United Guilds Service at St. Paul's Cathedral following the next day, from not knowing a soul amongst other Masters on the Monday of my Installation to the luncheon at Stationers' Hall after the service on the Friday, I was certainly on first name terms with a lot of them. It struck me as quite a coincidence that the first name of most Livery Company titular heads seems to be Master. Of course there's the odd Prime Warden and Upper Bailiff but it's quite entertaining to see everyone's head turn round when somebody calls out, "Master." It reminded me of being in Disneyland when a little voice would call out, "Dad."

My Mistress and I were then allowed one day off before we were back in the thick of the social whirl with our being invited to the annual Freddie Stringer Lunch at the Air Pilots' Flying Club in the clubhouse at White Waltham. Luckily we felt that we were amongst old friends on this occasion so I was able to leave my Debrett's at home for once.

Later that week I attended a working dinner hosted by the Archbishop of Canterbury at Skinners' Hall discussing apprenticeships and career aspirations for young people. That same subject resonates with the plans stated for my year in my speech after the AGM. Indeed this was followed up by the Young Aviators' Dinner co-hosted by ourselves and the Air League at the RAF Club where recruiters from all the services along with commercial airlines engaged with young people discussing options and opportunities available. Feedback I have received indicates that the evening was a great success generating much enthusiasm and inspiration.

The decommissioning of our affiliated ship HMS Ocean at Devonport in the presence of HM the Queen was indeed a very special occasion. This event can surely only be bettered by the commissioning of our new affiliate HMS Prince of Wales, the second of the UK's new Queen Elizabeth-class aircraft carriers destined for the Royal Navy. Next year's Master will undoubtedly be invited to be present at the commissioning ceremony but for now, I was privileged to be invited, together with the Clerk and Past Master Tudor Owen, who was instrumental in facilitating the transfer of affiliation, on a tour of the new ship in Rosyth dockyard on the Firth of Forth.

If being in the presence of her Majesty once were not enough, my Mistress and I attended Buckingham Palace on the 15th May for a Royal Garden Party. I'm getting to be quite a regular at Lipman & Sons in High Holborn where they kit me out in all sorts of appropriate attire for the occasion. At least I can rent mine whereas the Mistress takes every opportunity she can to increase the diversity of her wardrobe. I can't blame her as I would do the same of the roles were reversed.

Well, as usual, the deadline for publication beckons and, since I write this piece ahead of the Livery Dinner, I trust that a most convivial evening would have been enjoyed by all and I look forward to regaling you all with further tales of Masterly adventures in the next edition of Air Pilot. Until then, watch those crosswinds!

From the Desk of the Director Aviation Affairs

Liveryman John Turner

With less than a year to go to the UK's departure from the European Union, Prime Minister Theresa May invited the UK aerospace industry to a meeting at Downing Street on 26 April 2018. described There, she the huge contribution that the sector has made to the UK's economy and reconfirmed her government's intention for the UK to remain part of the European Aviation Safety Agency after leaving the EU. That just leaves the minor issue of negotiation in the way of a sustained aviation environment in Europe! The Prime Minister discussed Farnborough International Airshow, acknowledging its significance and importance and pledging government support to UK industry by using it to show the world that the UK is - and will remain - a leading aerospace nation.

Airshows of all types provide us with an essential shop-window to promote what we aviators do and more specifically our enthusiasm and love of aviation. It is generally accepted that a majority choosing to follow a career in aviation were moved in that direction by attending an airshow; some informal surveys suggest the figure in some companies is as high as 80%. Of course, getting people excited about aviation is only the first step. Many then follow up the initial spark of interest with a visit to their local airport and flying or gliding club, going on to careers in science, engineering and aviation, sometimes as pilots or maintainers. Although often not recognised by governments, it is airshows, GA airfields and flying clubs that provide the bed-rock on which our community and industry depends.

It is also accepted that we face a future massive shortage of people to fly and maintain the world's airliners as current recruitment and training fall well short of the numbers of people retiring and new aircraft being built. The extent of the shortfall does vary across the globe but without consistent and considered actions, many countries may be unable to sustain their aerospace and aviation industries for want of suitably qualified people.

Unfortunately, at a time when we can illafford to overlook any factor that may increase awareness and enthusiasm for aviation, the UK has seen a major and continued reduction in the number of airshow permissions granted year on year since 2014 with audience numbers falling from more than 7 million to a little over 4½ million. Similarly, General Aviation airfields have been closing at a potentially catastrophic rate to be replaced by housing developments. became interested in aviation as a result of watching Tiger Moths, Austers and Chipmunks flying over my garden - I lived in Ipswich not far from the grass airfield - but it was attending the airshow at RAF Wattisham that marked the start of my determination to become a pilot. Ipswich airport is now a housing estate and the airshow at Wattisham last year was restricted to station personnel, their families, and contractors. Europe has seen shrinking defence and air force budgets since the end of the Cold War (though unfortunately that might be about to reverse). The RAF comprised some 150,000 personnel when I visited Wattisham, rather than the 34,034 full time 'trained and untrained' in 2017. Military support to airshows has also diminished over the years as numbers and growing operational demands have pushed public engagement at air displays down the list of priorities.

It seems increasing likely that a young child growing up in Ipswich today will only encounter aviation as a passenger; airport terminals are hardly likely to create the same degree of interest!

There is work on-going: in the UK parliament, an All Party Parliamentgary Group on General Aviation (APPG-GA) has been established with four working groups to address individually GA Airfields, Airspace, Tax and Regulation, and Heritage, with the latter looking at how to sustain our flying heritage aircraft and the airshows that provide the platform and a line of income for those aircraft operators. As is often the case, the Air Pilots are well represented; five of us were at the last meeting of the APPG-GA Heritage working group. UK, and I'm sure in all our Regions, this almost subliminal influence extends to many other organisations; I'll not list the UK organisations for fear of missing out one! What that does mean is that when you read any statement by an aviation organisation, there will probably have been at least one Air Pilot somewhere in the background helping to form the opinion.

Finally, the UK's Laser Misuse (Vehicles) Bill has passed its 3rd Reading without amendment, so there is now only the formality of Royal Assent before the Bill officially becomes an Act of Parliament. This is a magnificent achievement and the culmination of three years of work by the UK Laser Working Group (UKLWG) in coercing coordination of several areas of government and government agencies. Several at DfT have kicked down doors across Govt and made this all happen. There is still work to be done on obtaining effective controls over the import and sale of high-powered lasers but for now we can relax in the knowledge that we have addressed the problem of laser attacks against aviation, and in particular given the UK police better means of tackling those who risk the lives of others by deliberately misusing lasers. It should come as no surprise to hear there were Air Pilots on the UKLWG, including its Chairman.

The Foundling Museum

By Denise Cox - the Master's Lady

April saw an outing I organised to the Foundling Museum in London's Brunswick Square. I had been to this museum a few years ago and found it to be a quite unusual and humbling experience; not your typical well-known tourist attraction but well worth a visit.

This time, as a small group of sixteen ladies, we had our own guide – a delightful lady called Pamela Scott who was knowledgeable and passionate about her subject, giving us a great insight as to the charitable work of a certain Captain Thomas Coram. He was a ship's captain who, in 1739, established the first children's charity in the UK – the



Foundling Hospital.

This provided care and education to thousands of children before closing as a residential institution in 1954. Nowadays it is known as Coram, the children's charity. Interestingly there is a park very close by to the museum where adults may only enter if accompanied by a child.

After our guided tour we had a short stroll to the Lumen Café in nearby Tavistock Place, rounding off the visit with a delightful lunch.



GAZETTE APPROVED BY THE COURT 10 MAY 2018

ADMISSIONS	As Freeman	DECEASED
	Gareth BLISS	Richard JOHNSON
As Upper Freeman	Ian MELIA	,
Pik CHIU (HK)	Aaron WHITTAKER (AUS)	
Mahmoud ELKOT (OS)		RESIGNATIONS
Maimoud Elicot (00)	As Associate	Craig CAMPBELL (NA)
Mark EVERS	Kyle ROBERTS (AUS)	Lawrence HAWTHORN
Martin HARRIS (HK)		Edward MALLOCH (NZ)
Christophe HOARAU (HK)	ACKNOWLEDGED BY THE COURT	Derek MARPOLE
Vanessa JAGO (NA)	10 MARCH 2018	Martin SLACK
Simon MORAN (HK)	REGRADE	
Alistair NOBLE (HK)	As Liveryman	FORFEIT ALL BENEFITS
` '	John BOWDEN	Alexander FOX
Gregory PERILLEUX (HK)	Oliver RUSSELL	Sean McGEOUGH (OS)
Denis PORTIER (HK)		Declan TIERNAN
Brendan ROSCOE (HK)	REINSTATEMENT	
Dichdail 10000E (1111)	As Upper Freeman	Gillian TUNLEY
Joshua TUPPEN (HK)	Christopher GALL (HK)	Jonathan WINDOVER



The City Livery Banquet, 20th April

By the Editor

Three City livery companies — the Air PiIots, the Coachmakers, and the Engineers, combined to celebrate a century of service by the RAF, at the Guildhall on a balmy April evening. This was preceded by an exhibition of key airframes and engines in the Guildhall Yard. A Sopwith Camel and SE5a loaned by the Brooklands Museum, together with repro versions of the Spitfire, Hurricane and Typhoon were available for close inspection, and had received visits from many Air Cadets over preceding days.

After a champagne reception, we proceeded into the Great Hall for a splendid dinner, accompanied by some great music from the RAF Band. Tony Edwards FRAeS, Master Coachmaker (and liveryman of the Air Pilots) had an aviation background, having been a member of the University of Birmingham Air Squadron in his time. He welcomed guests with some trenchant and cogent comments on defence spending and an overview of threats to our national security. He pointed out that in 1945 spending on defence amounted to over 60% of our GNP, and stressed the need to increase our current levels by 50% over the next



The RAF colours were marched in, and after the meal there was a brief drill display by the RAF Queen's Colour Squadron. A videoed interview with Battle of Britain pilot, Geoffrey Wellum, was shown; he noted "Today's generation, if and when the chips are well and truly down, will respond just as we did..."

The Lord Mayor of London, Charles Bowman, claimed some RAF heritage in that his father-in-law was a Buccaneer pilot in his time. The Chief of the Air Staff, Air Chief Marshal Sir Stephen Hillier, started his speech by informing the audience (with much pleasure) that the RAF had that day beaten the Navy 31-21, to make a clean sweep of the Inter-Service rugby matches (leaving the Army v Navy game to be a tussle over the wooden spoon)! This was quite an historic event. He pointed out his sartorial nod to the RAF's heritage - a Spitfire cufflink on one arm, an F35B on the other. In terms of relations with the City, he pointed out that 601 Squadron RAuxAF has recently been reformed, which in addition to 600 Sqn forms a method of using London's civilian talent He made some pertinent



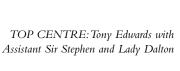
The RAF Colour on parade

comments about how our Armed Forces remain critical to protecting the nation's assets.

The evening's guestlist was stellar: it included Benny Goodman, a veteran of 617 Sqn's Tirpitz raid, seated next to Martin Withers (of Op Black Buck fame); senior defence industry figures such as Ralph Robins of Rolls-Royce; and what seemed like every living ex-Chief of the Air Staff, together with one to three stars of today's RAF in abundance. Not to mention a very healthy sprinkling of Air Pilots. A truly great evening to celebrate the RAF's centenary.



The Master with CDS



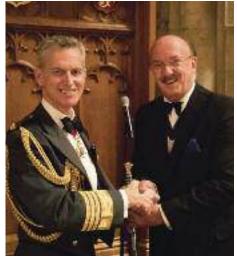






The Master with former CAS ACM Sir Andy Pulford

BOTTOM CENTRE: The Master with former CAS ACM Lord Jock Stirrup



The Master greets CAS



Sir Stephen in full flow



Liveryman Prof Diana Greene-Davy deep in conversation

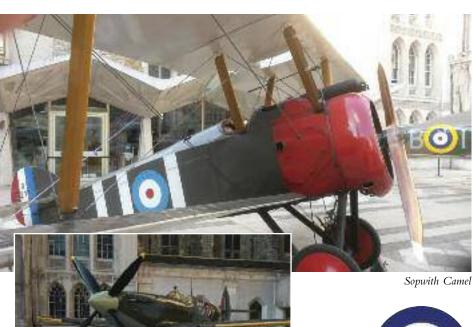


Air Pilots enjoying the pre-dinner sunshine













The Cobham Lecture 2018 Behind the Men (mostly!), Machines and Myths -100 years of the Royal Air Force

Seb Cox, Head of the RAF Air Historical Branch

By the Editor

After an introduction by the Master (no relation!), Seb made a valiant attempt to squeeze a century of derring do and politicking into an hour or so. As he made clear at the outset, this challenge was made more difficult by the fact that half the audience thought they knew everything about the subject already, yet our guests – 52 other livery companies were represented in the audience – were possibly more humble about that lack of knowledge.

He made it clear that we have more senior figures than Hugh Trenchard to thank for the creation of the vibrant service we know today. David Lloyd-George, a somewhat more colourful figure than recent Prime Minsters - had proven a two-edged sword: he was a political 'enabler' of the service's creation, setting up a Cabinet Committee, of only himself and Jan Smuts, yet he very much wanted the nascent service tethered to his political control. Seb considered that the appointment of Churchill in 1918 as Secretary of State for War and Air was possibly a precursor of the service being killed off at birth.

The cost-effective prosecution of the tribal suppression in Somaliland by the RAF's 'Z Force' in 1920 was of course a saviour for Trenchard's aspirations. Cox lauded his progressive vision to create an institution such as Cranwell, and also that of Halton – where, as he pointed out, the top three apprentices of each year's intake were then commissioned at Cranwell (at

no cost to their parents, an attribute which no doubt resonated with the audience).

The trials of the Expansion Schemes of 1934 and onwards were explained, with political direction meaning the chase was for quantity not quality of new types and airframes. Lord Inskip received a glancing blow from our speaker at this point. Seb explained the critical saga about the Whitehall/CAS tussle regarding sending to fighters to France once WW2 started. The Cabinet were understandably reluctant to commit the BEF without air cover; yet Newall (as CAS) and others were equally reluctant to risk their slender fighter resource on a campaign with such obvious risks. (Presumably the Air Staff were also conscious at this point that they would be submitting combat virgins into battle with Luftwaffe crews, many of whom had become battle hardened in Goering's training exercise, aka the Spanish Civil War).

Once the Battle of Britain started in earnest, Seb pointed out that British manufacturing rates – and rates of supplying newly-trained pilots – both exceeded that of the Luftwaffe. He did not shrink from evaluating the worth of Bomber Command: rates of civilian casualties in Germany were broadly almost 10 times that of Britain. Yet he pointed out that Bomber Command's strategic value was in reducing German oil capacity by 90% – neutering their fighter capability by late in the war, and

also meaning that German tank assets after D Day were hamstrung. 2 TAF's Typhoons also meant the Wehrmacht's tanks were constrained to night-only movement. The RAF had similar success in crippling Rommel's supply chain the Med. He explained the strategic rationale for the notorious Dresden raid.

The less glamourous side of the RAF received its due praise in Seb's talk – the FEAF's noble record in supplies 'over the Hump' was mentioned; and the dual RAF/British civil operation in the Berlin Airlift (92,000 tons of 'wet' fuel was transhipped) was a resonating feat which helped to ensure the shape (and stability) of Europe as we know it today.

Moving necessarily swiftly over the Cold War era, Seb pointed out that the first use of precision-guided munitions (PGM) was in the Falklands in 1982 – they are now almost the universal tool, and he underlined that RPAS/UAVs, since they use solely PGM, are not the indiscriminate weapons as sometimes suggested in the popular press.

Sensibly avoiding moving into predictions for the next century, Seb faced a barrage of questions – which indicated the great interest his talk had stimulated. After a vote of thanks from the Master Elect, the very grateful audience adjourned (appropriately) to the Churchill Bar. A very stimulating and timely lecture.



RAF 100 Flypast

By Liveryman David Cockburn

Because the RAF had decided not to mark the special date with any flying event, a group of Chipmunk and Bulldog owners (including several members of the Honourable Company) decided to it themselves. On the 100th anniversary of the formation of the Royal Air Force they planned to fly a formation of privately owned Chipmunks and Bulldogs over Bedfordshire to show their respect for the Service in which many had served. RAF Henlow very kindly agreed to host the event, which was organised by Rod Brown, who is known to many as an expert on all things Chipmunk.

Unfortunately the British weather conspired against them. Of the originally planned 24 aircraft, initially only a brave 6 were able to join the 2 based at Henlow before night fell on Maundy Thursday. The others either could not take off from their flooded base aerodromes or were forced back by the low cloud and precipitation which characterised that period. Instead of refining their formation skills and practising maintaining less usual formation positions, those who did

manage to reach Henlow spent Thursday, Friday and Saturday, and the early part of Easter day itself, studying weather 'apps' on mobile phones in the vain hope that such practice would become possible. Nevertheless, occasional marginal gaps in the weather allowed a few others to trickle in, including one Chipmunk which crossed the Channel 3 times enroute.

However, in the afternoon of Sunday, April 1st, the cloudbase in the operating area lifted just enough in the afternoon to allow 10 Chipmunks and 2 Bulldogs to join formation over Bedfordshire. With Master Air Pilot Upper Freeman Robert Miller in the lead Chipmunk, the crews demonstrated the reason for the flight in an appropriate (if rather less spectacular than hoped) formation as they overflew both Cranfield and Henlow. A longer flight was impossible because those with long distances to travel had to reach their destinations before the forecast weather deterioration (and in the case of the French crews, darkness).







The Livery Dinner

By the Editor

The 60th Livery Dinner was again at the well-liked Drapers' Hall. At the clothing ceremony beforehand, two Freemen were elevated to the Livery: Captain Alex Fisher OBE, and John Bowden. Five Master Air Pilot certificates were then presented by the Master.

One of the principal guests, HRH Prince Michael of Kent, sadly could not be with us, as he had unfortunately missed some flight connection on his return from Germany ("Time to spare, go by air", as some wag whispered to me). Once the dinner was underway, the new Warden, introduced Robin Keegan, Company's guests. Our principal guest (in loco for the CAS) was Air Vice Marshal Gerry Mayhew CBE, AOC 1 Group. Although Robin did not mention it, Gerry has an almost unique attribute for a two star fast jet pilot, in that he started off his RAF career as an air trafficker! Robin also welcomed Rear Admiral Simon Hedley, the new President of the RAeS. Since the Navy he had worked as a programme director for Rolls Royce. Col John Bryant has been Commandant of the Army Air Corps for the last three years. Dr. Michael Smith, despite his role as Master Fanmaker, had a distinguished aviation heritage, as well as being a drummer in

his spare time. We also welcomed Haydn Davies as Master Furniture Maker, whose background was in construction industry testing. Professor Ron Summers had had a career in bio engineering measurement control, and was with us as Master Scientific Instrument Maker. We were delighted to welcome Commander Mike Kingdom from our newest affiliated unit, HMS Prince of Wales (see News). Finally Robin welcomed Wg Cdr Colin Gale of another affiliated unit, the London Wind of the Air Cadets. The University of London Air Squadron was represented by its OC, Flt Lt (formerly Air Cdre) Ken McCann, and his senior student, APO Ryan Staple.

In his speech, our Master, Colin Cox, welcomed Admiral Lord Boyce, fittingly here as a former Master Draper. Colin summarised the Company's progress in the last year: as a measure of the pace of change, in its Centenary year, the RAF Museum has taken delivery of its first Predator UAV, and it was fitting that we had recently opened a new category of membership for professional UAV operators. He noted that having local air displays, and local GA activity, are vital for stimulating young people towards a career in aviation, and lamented the threats to GA aerodromes particularly in



The Master with Air Cdre McCann and APO Staple



The Master greets Wg Cdr Colin Gale

The Master with Sam Waller at her second Livery Dinner



Master Air Pilots with their new certificates



The Master with new Liverymen John Bowden (L), and Alex Fisher (R)



the South East of England.

More positively we have established good relations with the All Party Parliamentary Group on Aviation, and have made a robust submission to defend Class D airspace near Oxford and Farnborough (see elsewhere in this issue). He noted that a shift towards Performance Based Navigation should reduce the need for controlled airspace. Colin was also very impressed by the standard of the 450 cadets of the London Wing he had met on a recent visit. His toast was appropriately the "Freedom of the Skies".

AVM Mayhew reminded us of the gestation and birth pangs of the RAF, and indeed the WRAF, which was also founded on April 1, 1918. He also covered the evolution of naval aviation.

He noted the foundation of the Air Training Corps in 1941, which now as the Air Cadets goes "from strength to strength" (a point possibly open to contention!). In the post war era he remarked wryly how, by the time it was decided that WRAFVR pilots should be able to receive full Pilot's Wings, the first recipient, Plt Off Officer Jean Lennox Bird, had been a pilot for 20 years, with 3,000 hours on 90 types! Other historical landmarks he noted included the first display by the Reds (Little Rissington, 1965), and Op Black Buck in the Falklands in 1982. Whilst in 1995 more than 100 years of British military ballooning came to an end with the disbandment of the RAF's Balloon Operations Squadron.

He looked forward to July 10 , when RAF100 activity will peak with a

Centenary service in Westminster Abbey, followed by a parade in the Mall and a flypast of "up to 100 aircraft" – "an unparalleled spectacle in modern times". With that he proposed the toast to the Company "May it flourish root and branch for ever". The Loving Cup preceded the Stirrup Cup, and the usual culprits (the writer included) carried on a select after-party at the RAF Club, where the evening was judged a great success.

PM Dorothy Saul-Pooley in conversation with Admiral Lord Boyce



On Sunday April I, 100 years to the day since the Royal Air Force was formed, the RAF Museum hosted over 15,000 visitors across the weekend with a series of activities and events. Visitors to the Museum were treated to theatre, family activities and a special appearance from the RAF Baton Relay team.



The Front of House Theatre Company breathed life into some of the amazing stories set amongst our First World War exhibition. Visitors were able to talk to and interact with actors in character representing the voices of the men and women that are part of the RAF Story.

At the close of the day, serving RAF personnel carried the RAF100 Baton into the Museum grounds. The Baton is being carried across the country and around the world, visiting 100 locations in 100 days. The relay started on Sunday in Central London, and the team of RAF runners were met at the Museum by our CEO Maggie Appleton who ran the last leg of the relay with the team."







RAF 100: Thanksgiving Service and parade at Bury St Edmunds

By the Editor.

Photos by Cpl Andrew Holmes, Station Media Ops, RAF Honington.

By happenstance my wife and I were able to attend the centenary service at our County's cathedral on April 29th. The joint organisation by the bishop, his deans, and the chaplain of RAF Honington, was first class, the service starting with the Airman's Hymn ("O Ruler of Earth and Sky", sung to the tune of "For those in peril on the sea"). The event was hosted by the RAF Regiment, whose HQ is at nearby RAF Honington, and of course whose Hon Air Commodore is Assistant ACM Sir Stephen Dalton (who was not present).

After the service the RAF Regiment, together with droves of Air Cadets, marched through the town before a

concert by the Apex Centre. Despite dismal weather the BBMF made it for a flypast. A variety of military vehicles used by the Regiment were on display, although I noticed that the armour on the Twenties/Thirties TE Lawrence-style RAF armoured car looked suspiciously like marine ply! There was a gratifyingly high level of public interest in the event, and it was also good to see Honington's Station Commander had recovered from the rigours of the Buccaneer Aircrew Association's annual dinner (at which several Company members were to the fore) in his Officer's mess a couple of days earlier!





Young Aviators Dinner – 7th April 2018

By the Editor (with thanks to Sam Gervais)

The Air League and the Honourable Company of Air Pilots co-hosted the Young Aviators' Dinner at the Royal Air Force Club, Piccadilly, London Saturday 7th April 2018. After welcome drinks in the Churchill Bar, guests enjoyed a three course dinner in the ballroom until late. The 2018 dinner was supported by Boeing UK, and had a continued interest to inspire and support younger members from any background in the UK to pursue a career as a professional pilot, both military and civil. This was a unique event for young members of both

organisations to network with airline and military recruiters and representatives while getting to know other young aviators.

The dinner welcomed experienced pilots, navigators, the recruitment and selection teams from the Royal Air Force, the Royal Navy Fleet Air Arm and Army Air Corps, as well as recruitment and flight operation representatives from British Airways, easyJet and Virgin Atlantic.

The two guest speakers were Captain David Morgan, Director of Flight Operations, easyJet, and Air Marshal Stuart Atha, Deputy Commander Operations RAF. Dave Morgan explained how his airline had committed to 20% of its intake being female by 2020. Richard Pillans, Boeing UK's Chief Test Pilot, advised young aviators "don't worry about setbacks in your career". AM Stu Atha was equally upbeat "Be persistent!", he exhorted, and explained that, in celebrating its Centenary, the service wished to reach out to 2m young people in the UK to encourage an interest in innovation and technology.





Our Master is rapt

Air Marshal Stu Atha meets some young aviators

Young aviators





The North American Region's Annual Visit to Canadian Forces Base Comox, British Columbia April 19th, 2018

by Liveryman Alistair T Beaton (Executive Board Director of the North American Region)

By kind invitation of Col Michael Atkins CD, (Upper Freeman), Commander of 19 Wing RCAF and Lt Col Mike French, Officer Commanding our affiliate Squadron - the RCAF Air Demonstration Team: the Snowbirds, Air Pilots members attended the CFB Comox, Vancouver Island, British Columbia in April to watch the Snowbirds perform their pre-season practice display, and to visit the other RCAF Squadrons based at Comox.

This year the weather gods looked with favour upon us and three light aircraft left on our pilgrimage from Abbotsford and Pitt Meadows airports in the Lower Mainland of British Columbia at around 0630 for CFB Comox, some 107 nautical miles to the west of Abbotsford.

Dr Steve Stewart, Liveryman, was PIC of the Cessna 172, Abbotsford Flying Club aircraft, in which I was a passenger. Retired Transport Canada Inspector Bob Leroux and his wife Valerie flew their well equipped Piper Turbo Arrow, and Johnny Rodriguez and his passenger, student pilot, Armando, flew out of Pitt Meadows airport in a Canadian Aviation College C172. Unfortunately the crew of a second C172 from the Vancouver Aviation College had to cancel their flight at the last minute, due to technical problems.

Our scenic flights left the Lower Mainland crossing the City of Vancouver, English Bay and the entrance of Howe Sound, (named by Captain George Vancouver RN, after a British Admiral), then flying parallel to the Sunshine Coast to the southern tip of Texada Island, passing abeam Gillies Bay Airport, before descending across the Strait of Georgia into CFB Comox.

On arrival at CFB Comox we were warmly welcomed by Captain Evan Southern, a helicopter pilot from our affiliate 442 Transport and Rescue Squadron. He certainly went above and beyond his hosting duties. Thank you Evan!

The tour started with a visit to 407 Squadron. This Aurora-equipped Squadron keeps watch over the Pacific Ocean looking for illegal fishing, migration, drugs and pollution in addition to looking for foreign submarines. After a short briefing on the history of this squadron, we were taken



431 Sqn CT 114 Tutor





The Canadian flag flown the breadth of the country



Aurora





Buffalo cockpit







Snowbirds

Howe Sound



on a tour of one of the operational aircraft.

Immediately following our visit to 407, it was time to watch the Snowbirds do their first practice air demonstration of the day. Adjacent to the apron where the Snowbirds were parked, we were welcomed by Lt Col Mike French, the Officer Commanding. Mike was closely watching and critiquing the team's performance as they demonstrated their expertise in formation flying and aerobatics.

At the end of the display, Col Michael Atkins unexpectedly drove up in his RCAF staff car to add his welcome to our visit. This was very much appreciated, since Michael, we were told, was very busy escorting very senior officials visiting from HQ in Ottawa.

Retired Transport Canada Inspector Bob Leroux and his wife Valerie brought the Canadian Flag they had taken with them on a Pacific Ocean to the Atlantic Ocean flight they had done last year to commemorate Canada's 150th Birthday and Bob's 50th year as a qualified pilot. Bob and Valerie stopped at all of the Provincial Capitals, as well as Ottawa on his epic trip and was welcomed by the Legislators at each location. Bob and Valerie also stopped by a number of Royal Canadian Air Cadet squadrons along their route, to encourage cadets to pursue their aviation interests and perhaps take up a career in aviation. Photographs of Bob, Valerie and Lt Col Mike French were taken with the flag, next to a CT114 Tudor aircraft.

After lunch, the afternoon was spent visiting 442 SAR Squadron. The Mission of the Squadron is "That Others May Live", and to accomplish its mission, this squadron operates the Cormorant All Weather Helicopter and several 50 year old DH Buffalo aircraft.

Before visiting the said aircraft, we were given a very detailed briefing by one of the senior SAR technicians in what is involved in training as a Search and Rescue technician. Mountaineering, parachuting, canoeing, advanced first responder medical care, are just a few of the daily drills and training that one has to perform (all before breakfast or so it would seem?).

The time passed quickly and it was time to depart for home base. However, before doing so, we were treated to a display of the solo CF 18 Hornet Demonstrator – all freshly painted in its 60th anniversary or NORAD livery – and the afternoon display of the Snowbirds.

On behalf on the Honourable Company of Air Pilots – NA, I wish to thank Col Michael Atkins, Lt Col Mike French and Capt Evan Southern for their invitation and warm welcome to Comox. We all had a most wonderful time. Much appreciated!

A Gin Making Masterclass at the City of London Distillery (or COLD for short)

By Associate Carolyne Sibley-Harries

Located just off Fleet Street, next to the journalists' church, St. Brides, is an entrance that leads down a flight of stairs to an underground bar and distillery. Here is where a small group of us, organised by Chris Ford, met in the bar below the pavement on Thursday 3rd May 2018. One large wall consisted of large bomb proof glass panels with the copper stills (named Clarissa and Jennifer) clearly visible and gleaming behind them. The bar looked cosy, and seats around a hundred people, and we were given comfy sofas for our small group of 16 as we waited to be met by our host, Jake. We were then all led into a small room off from the bar so we could make our own bottles of gin in pairs. The tables were full of jars containing herbs, spices, and dried citrus fruits, plus weighing scales and beakers. Jake Tuckey gave us a brief history of gin and about

The winning Gin



this distillery whilst we sampled a large gin and tonic from their selection of award winning gins.

COLD (City of London Distillery) was opened in December 2012, first producing a classic London Dry Gin, followed closely by the Square Mile Gin. 2017 saw the first awards. It is located in the heart of where many of the old gin distilleries used to be over a couple of hundred years ago, before the eight Gin Acts and amendments issued by the government at the time did their best to curb the population's very heavy gin consumption. Apparently the distillery is 547 steps away from St Paul's, and it is 548 steps from the base of St. Paul's to the top. I'll take their word for it. Gin can legally be called gin if it contains two main ingredients: juniper berries (which aren't actually berries, but tiny pine cones), and alcohol (ethanol, to be precise, and COLD's is bought in, and is 96.3% pure).

During the 18thC Gin craze gin had become so popular that it was having a detrimental effect on society, and about two hundred years ago saw new legislation to curb this trend. Very few gin distilleries survived, and for nearly 200 hundred years there wasn't a single gin distillery in the City. Due to the conflict between Britain and France, in 1689 an Act of Parliament banned the import of



Small stills

French wine and spirits. The British government actively encouraged the distillation of spirits from indigenous crops by cutting the taxes paid by the landowners, and propping up grain prices. Gin became cheap enough for even the poorest people of society. It quickly created a gin craze. In 1690, the monopoly of the London Guild of Distillers was broken by legislation, opening up the way for widespread production.

In 1723 the death rate in London outstripped the birth rate with up to 75% of babies dying before the age of five - gin was on the hit list of what to blame. So many women, apparently more than men, were addicted to gin, giving rise to foetal deformities and increased infant deaths; hence women were predominantly targeted in the war against gin, such as Hogarth's etching called 'Gin Lane'. Gin gained its nicknames of 'Ladies Gin' and 'Mother



Winners Gill and Ritchie Piper



Gill Piper



Ruth Cundy and Chris Ford



Measured botanicals



Chris Ford, Ruth Cundy and the Master

Gin', and the term 'Mother's Ruin' is still used today.

William Hogarth's infamous 1751 print called 'Gin Lane' showed people intoxicated on gin; a mother dropping her baby off the steps to its death; people being in utter destruction and desolation without any awareness of their actions. This etching was part of the social awareness propaganda, commissioned by the political satirist and magistrate Henry Fielding. The message was showing the evils of gin in contrast to the delights of drinking beer by Hogarth's other etching called 'Beer Street'. 'Beer Street' was depicted as a sophisticated and convivial street, where people worked and prospered whilst drinking beer as a reward for all their hard labours at the end of the day. Gin was finally phased out, and was replaced by beer and rum.

There is now however a gin revival. This has been helped by the EU passing a law in 2008 revising the definition of gin (ie. minimum strength of 37% alc./vol.; juniper must be the predominant flavour). There are three definitions: 'Gin' (ie. flavourings can be either approved or artificial; no restrictions on approved colouring or flavouring); 'Distilled Gin' (ie. made in an approved traditional still; approved flavourings sweeteners and additives added after distillation); and 'London Gin' (ie. higher quality ethyl alcohol; flavourings used during the distillation process only; a small amount of sweetening may be added after distillation, but apart from water, no other substance may be added). There were two English laws dating back from



Jennifer and Clarissa

the 1800's that stopped distillers from producing gin that didn't use an 18 hectolitre pot or larger (so preventing the little cottage industry), and that a brewer was not allowed distill gin as well as brew beer. These laws were challenged and overturned which opened up the opportunity for the small-batch micro distilleries, like the City of London Distillery.

By the way, here's a pub quiz tip: The word 'gin' was derived from the Dutch drink 'Genever', which was served to the Dutch Navy. After two pints of the stuff they were somewhat squiffy, and must have had a bit of a laissez-faire attitude about fighting, hence the phrase 'Dutch courage' (that's two top tips).

We were making London Dry Gin, so we started off with three main botanicals which are the basis of this type of gin, namely juniper berries (great diuretic and full of antioxidants), coriander seeds, and angelica root (used for binding the botanicals together in the distillation process). We then had many different choices of other herbs and spices to add to our recipe which were split in to sub groups of earthy flavours; floral; mellow spices; citrus; savoury and bitter; and pungent spices. We carefully had to weigh each selection of our own recipes whilst trying to imagine what the botanicals would taste like together. This was helped by being given large g&t's, all in the name of research.

When our little bowls of potential flavours were ready we were taken to another room full of tiny stills, each still named after the seven dwarfs in Snow



Samantha and Christine

White. Our little pots of dried botanicals were added into the still, along with the ethanol. We watched the clear liquid drip out into a beaker, whilst tasting the distilling liquid at various stages of the process as the flavours changed dramatically. Jake added water to dilute the gin to about 40% proof and bottled them all as we were all introduced to Clarissa and Jennifer in their large distillery room. Meanwhile the staff did a taste off between each of our gins to see which one was best.

After another gin and tonic, we had to seal our bottles with a glorious runny red wax. The ends were dipped, twisted and swirled, then cooled off in water. Lastly, we each stuck our chosen named stickers on to our own bottles. Then there were the results of the taste off. The winning gin was from Richie and Gill Piper, with their own brand named 'Spectral Morning'. Runners up were Chis Ford, Ruth Cundy and Colin Cox with their gin, 'The Masters Cuffs It', and Samantha Waller and Christine McGee with 'Ad Astra'. Time for a celebration and another gin and tonic.

It was all 'ginormously' good fun, and educational too. I think most of us were flying high at some point during the afternoon and thankfully this mother wasn't too ruined. It was a delight to be able to take a little bottle of gin home knowing that my partner and I made that (yes Sylvia Wheeler, we was robbed!). Jake and the City Of London Distillery were great hosts and it certainly has a bar that needs revisiting. All in the name of education, of course.

The Lunch Club – Highlands Flying, by Bill Innes

By Past Master Chris Ford

The April Luncheon Club was entertained to a marvelous tale of nostalgic aviation in Scotland related in a very interesting and informative fashion by Liveryman Captain Bill Innes.

Bill, who now lives in Glasgow, originated from the Outer Hebrides where the ferry was the only link to the mainland before the arrival of three competing airlines in 1933. What had taken up to two days to achieve was now possible in 2 hours! Aviation was to open up a whole new world of freedom, commerce and eventually tourism to the Highlands of Scotland. It was also to prove a very challenging environment to conduct air operations, with poor weather, high ground and a shortage of navaids to test the skills of not just the faint hearted.

The initial three competitors were: Ted Freeson's Highland Airways based at Inverness who, operating with Dragon aircraft, often had an incredible regularity of 97% despite the hardships. Eric started Gandar-Dower Aberdeen Airways, and John Sword's Midland & Scottish was based at Renfrew. Two members of the team with Eric were Joseph "Jimmy" Orrell (later to move to become Avro's chief test pilot), who flew the first ambulance flight to Islay in May 1933, and the young Winifred

Drinkwater who had a commercial licence before she was 20. Both moved on to become qualified engineers.

Bill explained the evolution of the aircraft types utilised on the various routes, mentioning that often the strength of the wind (70 kts was not unknown) would mean that very little taxying was required as tails were held, passengers off- and on-loaded, with the aircraft taking off from where it stood! Crosswind techniques were often put to the test in sometimes very strong winds. The story goes that a DC3 en route from the mainland to Benbecula found itself stationary over Skye so had to divert to Tiree with a good tail wind.

This was a most enjoyable after lunch talk and IF the stories recounted are an indicator of Bill's ability to entertain then his forthcoming book — Flight from the Croft – due out later this year, should be a fascinating read



Rapide cockpit



The speaker by a BEA Dak



Harry McDowell











R34 Incinnan

Rae Drinwater Orrel

DH Dragon Rapide





STEM Collaboration with the Science Museum

By Past Master Chris Spurrier

One of my objectives last year was to encourage the teaching of STEM subjects in schools. As a result of a fortunate meeting I was able to engage with Nick Spindler and Katharina Steinkellner, both of whom work at the Science Museum in Kensington. We have had some meetings with a view to a collaboration which will benefit both us and them. We all know that there is a serious shortage of engineering students in the UK. To help address this, the Museum is holding a Year of Engineering across all its museum sites - London, of course, plus the National Railway Museum in York, the National Science and Media Museum in Bradford, and the Museum of Science and Industry in Manchester. In April the Kensington Museum held a series of engineering days for schools and families in their Engineer the Future gallery, and in

October there will be an engineeringthemed family festival, aiming to reach 9,000 people over nine days. The goal is to show children the diversity and breadth of the disciplines in which engineers work, and also to encourage diversity among applicants to these fields. I know this is not strictly about aeronautical engineering and certainly not strictly about applicants for flying careers. Nevertheless, as we all know, many engineering graduates go on to fly, and many pilots wish that the engineers had a design understanding of how aircraft are actually flown so that their flight deck or cockpit environment would be a better place in which to work.

We have been invited to attend the family festival days to talk about engineering in the aviation world, and how it helps us do our jobs. I very much

hope that some of us will take this opportunity to reach out to the young. The dates are 20th-28th October. Obviously, we wouldn't ask anyone to be there on every day but if we could find one or two on each day that would be wonderful. I shall be aiming to do three days there and I'd be delighted to hear from anyone who could spare a day or two for this very worthwhile cause. There will be a requirement for helpers to have a brief training session before the actual event — that will be made clear when we know how many of us will be helping.

My email is *chris@spurrier.org.uk* and I look forward to having an overflowing inbox very shortly

Book Review

Flying in Father's Slipstream - Leaves from our Flying Logbooks

By Liveryman Gp Capt Tom Eeles
Arena Books of Bury St Edmunds, £12.99 through Amazon

Reviewed by Liveryman Wg Cdr Andy Brookes FRAeS

The RAF celebrates its centenary this year and for much of that time, Harry Eeles and his son Tom both served as RAF pilots from 1929 onwards. During those years, military flying progressed from the wood and canvas biplane era of Gosport tubes and Biggles goggles to the fast jet age of Cold War readiness and subsequent humanitarian intervention. To illustrate the changes and, dare one say it, abiding certainties that characterised that period, Tom Eeles has come up with the very imaginative idea of telling one family's RAF flying story through consecutive and parallel eyes. Tom has done this by comparing the relevant pilot's flying logbooks from which much can be derived, even though (as I look at my two RAF logbooks) there is very limited space to write down overmuch. RAF logbooks are really an airman's diary of day-to-day events but any reader has to be aware that not much can be derived from a short entry such as "lowlevel navigation".

Tom Eeles has chosen seven entries from his father's logbooks which serve as pegs on which to compare the nearest equivalent from his own record of flying service. This is not too difficult in places – basic training is still very much basic training whether it be on the Avro 504 or the de Havilland Chipmunk. Similarly air-to-ground firing from a Hawker Hart in 1937 has much in common in flying skill and impressing the locals (if not weapon intensity) with shallow dive bombing the China Rock Range from a Canberra B(I)8 in 1965.

Given the paucity of detail available in his old man's RAF flying logbook, Tom cleverly crafts a narrative of RAF social and military history of the period. I didn't realise that all Cranwell Flight cadets in 1930 were issued with motor bikes which they were required to keep serviceable, the logic being that potential officers needed enough mechanical knowledge to identify and even rectify faults in the unreliable aircraft of the period when flying over remote corners of the Empire. This book is a fascinating personal history of RAF flying military flying and service life, which Tom brings alive.

Although Tom writes very informatively and lucidly, the great problem with his project lies in the imbalance between his flying career and that of his father. Tom was lucky enough to amass 8,500 flying hours over 50 years whereas Harry built up only 1,374 flying hours over a career span of 29 years. That wasn't a reflection of his flying ability - Harry was assessed as "Above the average as a light bomber pilot". Rather it reflects the fact that the RAF needed Harry Eeles much more as a staff officer. This becomes clear with Harry's wartime record. The single entry that Tom pinpoints for Harry throughout the whole of the Second World War is a delivery flight of a Westland Whirlwind F1 (an underpowered and politically blighted long-range beast) - from Dishforth to Drem, and from Drem to Grangemouth, a total of 75 minutes airborne. Harry had been good enough to serve as the AOC's personal pilot in the Middle East and to teach Bloggs to fly at 5 Flying Training School, RAF Sealand, but these were hoops that an aspiring senior officer had to jump through in order to move up the career ladder. When Harry left Sealand at the end of July 1937, he moved to London to take up the appointment of Personal

Assistant to the Chief of Air Staff. For the next two and a half years, Harry was a close witness to arguably the most crucial period of RAF evolution and expansion staffing covering the Munich crisis and the outbreak of the Second World War. What a shame that we cannot hear Harry's testimony from what must have been the closest any young RAF officer could have got to the centre of the unfolding drama of 1937 to 1940.

In sum, this book is really about Tom Eeles' flying exploits which are worth the price of this book on their own. Tom is not really flying in line astern of his father's memorable career, but rather his flying applied the afterburner to what Harry and his generation created, sustained and encouraged. Thank goodness Tom has put his recollections down for successive generations to read and to savour because, like many of us old and bold, he represents a Cranwell 'officers and gentlemen' tradition, and Cold War perspective that is receding into the mists of time.

Read this book and enjoy.

