



# Air Pilot

DECEMBER 2018 ISSUE 30





# 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

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

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Except where specifically stated, none of the material  
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## Diary

### DECEMBER 2018

|      |               |                         |
|------|---------------|-------------------------|
| 5th  | AST/APT       | Dowgate Hill            |
| 13th | GP&F          | Cutlers' Hall           |
| 13th | Carol Service | St. Michael's, Cornhill |

### JANUARY 2019

|      |                           |               |
|------|---------------------------|---------------|
| 22nd | APBF AGM & lunch          | RAF Club      |
| 24th | Court Election and Dinner | Cutlers' Hall |
| 24th | GP&F                      | Cutlers' Hall |

### FEBRUARY 2019

|      |                  |               |
|------|------------------|---------------|
| 12th | Lunch Club       | RAF Club      |
| 14th | GP&F             | Cutlers' Hall |
| 25th | Aptitude Testing | RAFC Cranwell |

Please note that meetings scheduled for Dowgate Hill may be relocated to our new office depending on the date of our move.

### VISITS PROGRAMME

Please see the flyers accompanying this issue of Air Pilot or contact Liveryman David Curgenven at [visits@airpilots.org](mailto: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

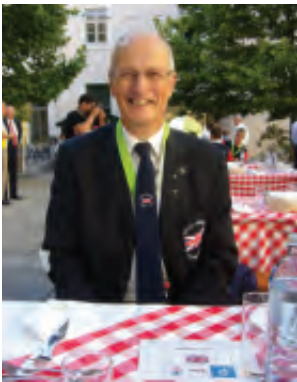
Please check on Company website for latest information

Cover photo: The Master gives his address at the Trophies & Awards Banquet  
(Gerald Sharp Photography)



# A message from your Editor...

I was hoping that this issue would be the only journal you read this month – on paper or on online – with the possible exception of Bridge Monthly or Gardeners’ World, that does not mention that b\*\*\*y ‘B’ word. I write this in one of the most turbulent weeks for British politics and society that I can recall. The nation is at a cross-roads; it is perhaps beyond irony that I am writing this having just returned from an aviation conference. Almost fifty pilots, from 23 countries, from Europe (both within and without the EU), and the Near & Middle East, conversed, socialised, and made decisions and plans with near perfect ease. It hardly needs adding that this was done without the benefit of any input from politicians. Indeed the nearest we got to the latter, the FAI, were viewed as a necessary background presence, whose influence was to be minimised. Pilots are good at making decisions – it is how we are trained!



The conference, like most of international aviation, was unsurprisingly conducted in the English language. It brought home to me our good fortune to be native English speakers, and my admiration for the linguistic skills (largely impressive!) of my fellow aviators. It was a useful nudge that, in my opinion, it behoves we native English speakers to participate fully in the administration and decision-making of such international fora.

In my last editorial I sought more material from glider pilots. I do not suppose it was a case of cause and effect, but you will read in this issue a piece on the wonders of gliding. If by any chance you were a touch cynical about the scope and scale of our scholarship activity, Fred Bull will set you right. He has been a recipient of a grant towards a gliding instructor course; he writes very movingly of the skills this has so enjoyably given him, and how he hopes this will provide a platform for a successful career in commercial aviation.

As was the case when I recently took part in a graveside service with some delightful schoolchildren to commemorate the centenary of the Armistice, it perhaps makes one ponder that the next (or next but one) generation deserve a better legacy than we seem presently to be offering.

*Paul Smiddy - Editor*

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# News Round Up

## MOMENTOUS WW2 VISIT



Air Commodore (ret'd) Charles Clarke OBE visited the crash site of his Lancaster in October, 74 years after he was shot down on a raid over southern Germany. On the night of 25th February, 1944 Charles, then aged 20, was the bomb aimer in a 619 Sqn aircraft near Stuttgart when his Lancaster was shot down by a German night fighter.

Several months ago Air Cdre Charles Clarke received a piece of metal in the post that was from his aircraft with an invitation to visit the memorial that the local German people had built. Charles, accompanied by friends Lt Col (ret'd) Phil Westwood RE, Monika Parker from Zagan, Poland, and Squadron Leader Tim Barlow, paid their respects to this fallen crew.

In 1944 Air Cdre Charles was lucky enough to bail out over the Black Forest. Local German enthusiasts Gunther John and Ingo Hauck recently discovered the site where the Lancaster plunged into the forest. This was Charles' first visit to the crash site. Its remote location made access difficult. This led to a special moment when assistance was given to Charles by the local fire department. The father of the fireman with Charles had also witnessed the aircraft fall from the sky 74 years ago. His grandchildren aged 13 and 8 years both attended the ceremony. A

series of hollows mark out the impact point of the engines, wings and cockpit. On reaching the site, Air Cdre Charles said "What a fine dividing line it was between my fate and that of my crewmates".

Charles had flown in several missions before this time becoming a PoW at Stalag Luft 3 (Zagan, Poland) to which he has returned many times with current serving RAF personnel. He joked with airport staff about not having to show his boarding card when he departed from RAF Coningsby on that fateful mission.

The memorial to his three colleagues stands just a few hundred yards from the crash; they were pilot Fg Off Erie Williams (Royal Canadian Air Force), Air Gunners Sgt William Walch, and Flt Sgt James Glazebrook (Royal Australian Air Force) – a truly Commonwealth crew. The local Mayor, Burgermeister Markus Wendel of Bad Teinach-Zavelstein, extended warm welcome to Charles and colleagues.



*The IPM representing the Master attended the City Remembrance Service*



## SCHOLARSHIPS

Whilst the provision of scholarships has become central to the beneficence of the Company and its trusts, it is worth looking over what else is out there for budding pilots. Given the decline in youth aviation opportunities offered by the RAF, it is perhaps fortuitous there has been a burgeoning of scholarships in recent years. The following list is not exhaustive.

The Air League offers c100 essentially 'air experience' scholarships and bursaries, including engineering (short industrial placements) and gliding.

TAG Farnborough Airport offers one PPL (managed by us), as does Cotswold Airport (aka Kemble) and London Biggin Hill. There is also a privately-funded PPL scholarship at EGKB. The Light Aircraft Association provides five bursaries offering £1,500 towards flying training. The British Womens Pilots Association offers 3 flying bursaries (not full PPL) and 2 fully-funded ATPL ground school courses. The British Microlight Aircraft Association has a Young Person's Flying Bursary.

Finally FSDP (Flying Scholarships for Disabled People (FSDP), familiar to many in the Company, does what it says on the tin, and has an extensive programme of PPL-related scholarships. All these schemes have different timetables, although the bulk work on the understandable assumption that flying training will be largely focussed on the summer months.

## A REMINDER OF A WONDERFUL UK SUMMER – RIAT 2018

*Photos by Freeman Will Eeles*



*Will Eeles reliving AAC days*



*"There I was at 200 feet "*

*Jordanian Air Force CAP team*



## GAZETTE

APPROVED BY THE COURT 22 NOVEMBER 2018

### ADMISSIONS

#### **As Upper Freeman**

Terence BUCKLAND  
Stephen BURNARD (AUS)  
Richard HAYLEY (HK)  
Nicholas HOLMAN  
Robert LEROUX (NA)  
Michael LING  
Taniya MORRIS  
John MURRAY  
John NYREN (NA)  
Gregory RULFS (HK)  
Paul SUTHERLAND (AUS)  
Craig WELLS (AUS)  
Benjamin WHITWORTH

#### **As Freeman**

Anne HUGHES  
Shaun PATRICK  
Michael RAWDEN

#### **As Associate**

Fahim AHMED  
Stephen DALY  
Daniel Ephraim DEDMAN  
Benjamin EAKINS (AUS)  
Réshé HARRISON  
Suleman HUSSAIN  
Jake KENNY  
Tsongirirai Linda MARUTA  
Amy Elizabeth PALMER  
Finian Luke SALTER  
Matthew STEWART (AUS)

### ACKNOWLEDGED BY THE COURT

22 NOVEMBER 2018

#### **REGRADE**

##### **To Livery**

Stephen BRIDGEWATER  
David ABRAHAMS  
Su INGLE  
Ian STEWART  
Alistair BEATON  
Carl BODDY  
Sidney KWONG  
Patrick SHERRIFF  
Michael HOLLAND  
Ian MURNING

#### **As Upper Freeman**

Peter NYE  
Nicholas PASCOE  
Edward SCURR

#### **REINSTATEMENT**

##### **As Freeman**

Jack CHONG (HK)

#### **DECEASED**

David DENNIS  
John MASON  
Peter READING  
James TIERNEY (AUS)  
Barry WHITEHEAD

### RESIGNATIONS

Christopher BENN  
Marc BIGAOUETTE (NA)  
Atholl BUCHAN (OS)  
John CLIFFE  
Lorraine EARL (NZ)  
Sophie FREESTONE  
David HILL (NA)  
Michael HOOD (NA)  
Richard JENNISON  
Jason LAWLEY  
Daniel MARTIN  
Jane MIDDLETON  
Sarang PANDIT (OS)  
Reginald PYCROFT  
David RYALL  
Lydia SZKATULA  
Ian TOBIN  
Cameron THOMSON  
Dick VERBURG (OS)  
Noel WHITE  
James WOODS

### FORFEIT ALL BENEFITS

David LEE (NZ)



# Master's Message and New Zealand Tour Report

By Captain Colin Cox

As you read this, Denise and I will have just returned from the second part of the Master's Tour and a report of that trip will, of necessity, not be able to appear until the February edition of Air Pilot. I am however writing this from the comfort of our room in the Northern Club in Auckland, having already commenced our Tour immediately after the Trophies and Awards Banquet, a report of which will no doubt be appearing elsewhere in this august journal.

I will confine this article to events that have occurred since I last wrote, which have mostly involved City and Livery functions. The Lord Mayor's Election at Guildhall on Michaelmas Day is always a spectacular affair, with Masters of the 110 Livery Companies processing in their finery across the Guildhall Yard from the traditional service prior to the event at St Lawrence Jewry. The thrust of my speech at Guildhall was to highlight our connections with the City and October for me, with the flying season having

*Presentation of The Master's Trophy New Zealand Region to Wing Commander Brett Clayton*



pretty well drawn to a close, was very much associated with aspects of City life.

A luncheon after the Lord Mayor's Election is traditional and this year was no exception, with a number of our members being hosted by The Worshipful Company of Cutlers at their hall in Warwick Lane. Our numbers actually outnumbered the Cutlers' own on this occasion but we are always very grateful for the continued strong relationship we enjoy, and I do believe this is reciprocated.

Not long afterwards I was robed up again for the Musician Company's Evensong at St. Paul's Cathedral. This is a lesser known but equally well-attended ceremony involving as many Masters as can be mustered for a processional in full regalia. With a reception held after the event in the Crypt this proved for me to be one of those City 'best-kept secrets'.

We enjoyed a Wardens' Supper a few days ahead of our monthly GP&F meeting at the Boot and Flogger wine bar in the vicinity of our new premises. I can highly recommend this establishment, being a wine bar of the Davy's chain, but we are going to be stuck for choice for hostelrys and eateries when we move into our new 'home' early in February. It might be asked why the wait until February before we move in, but the answer is that we have to spend some time having the layout of the building reconfigured for our use, such as aspects of wiring, lighting etc. Also, our agreement for the present temporary offices is still current, and we cannot exercise a break-clause in the agreement until the New Year.

Well, the Trophies and Awards Banquet was a fabulous affair, as ever, with many very deserving recipients of Awards. I won't single out any one individual or unit but I think we can all be proud of the marvellous job our Awards Committee, under the stewardship of Past Master Rick Peacock-Edwards has done over the years, as he hands over the reins of Chairman to Assistant Chris Palmer.

With no real time to recover it was back home to pack our bags for the five weeks away, travelling as we were, this time around, first to New Zealand and then on to Australia and Hong Kong. We arrived in Auckland after a pleasantly uneventful couple of flights with Cathay Pacific on Monday 29th October. We elected to slip in Auckland for one night before travelling down to Wellington, if anything to break up the journey.

Barry Mitchell, Administrator of the New Zealand Region, and winner of this year's Sir Alan Cobham Memorial Award, had arranged accommodation for us at the prestigious Northern Club in Auckland. Having only just arrived himself from London that morning after the T & A, Barry very kindly met us at the airport and drove us into town before going back to his home in the suburbs and catching up on some well-deserved rest. Denise and I were well and truly poleaxed so far as jet-lag is concerned. Thirty plus years of long-haul flying has never made flying across multiple time zones any easier. A five-hour transit at Hong Kong airport didn't help either.

The next day we took a taxi out to the airport and caught up with Barry again for our trip down to Auckland where we met up with Regional Chairman, Bill Bennett, at the Wellington Club in town. The following day saw a busy schedule of meetings with a lobby organisation, Aviation New Zealand, the CAA, Airways Corporation, the ATC provider and the Transport Accident Investigation Commission. The whole programme was seamlessly put together by Freeman Leslie Brown and it gave all parties an opportunity to discuss topical events germane to the Region.

That evening saw Denise and I hosting a



*Informal dinner at Wellington Club From L-R: Denise, NZ Regional Administrator, Capt Barry Mitchell, NZ Regional Chairman, Bill Bennett.*

cocktail reception at the Wellington Club for regional members and their guests, followed by an in-house dinner and a 'wrap up' of the day's events. Wellington is a lovely city but seemingly prone to being windy and the following day the weather lived up to its reputation, so a planned visit to Wellington Aero Club was called off, and Denise and I took the opportunity to visit an absolutely stunning commemoration of the Gallipoli landings on display at the Museum of New Zealand (Te Papa Tongarewa) in Wellington. Words cannot do this display justice and a side trip to the Capital would have been worth it just to see this.

Leaving 'Middle of Middle-Earth' Airport that afternoon we flew back to Auckland where we parted company with Barry until the formal dinner at the Northern Club the following evening. There I was to meet pretty well the entire complement of New Zealand Liverymen with the event being hosted by Liveryman Allan Boyce with his lovely wife, Lyn, saying Grace. Unfortunately Bill Bennett, as Chairman, had to give his apologies owing to a family bereavement. The dinner gave me the opportunity to present Wing



*Pre-dinner drinks: New Zealand Formal Dinner From L-R: Freeman David Park, Master, Denise, Liveryman Lyn Boyce, Liveryman Allan Boyce*

Commander Brett Clayton, leader of the New Zealand Black Falcons Aerobatic Display Team, the Master's Trophy New Zealand award, in recognition of 'Commendable leadership and outstanding contribution to display flying in New Zealand'.

So, there I will leave our travelogue for the time being until we can pick up the trail again in Sydney in the next edition. For now, as the time of joy and goodwill to all Freeman, Upper Freeman and Liverymen approaches (how's that for Political Correctness?), Denise joins me in wishing you all, around the regions of our world, a blessed Christmas and every good wish for the coming year. We hope to see as many of you as possible at our Annual Carol Service on the 13th December. Merry Christmas everybody!





# From the Desk of the Director Aviation Affairs

Liveryman John Turner

## “TO BOLDLY GO...”

It is a little while since the 18th June 2018 when U.S. President signed Space Policy Directive – 3, National Space Traffic Management Policy (see reference at the end of this article). However, parts of policy directive’s first section have parallels with the issues of my last topic and my eye was caught by the following:

*“Today, space is becoming increasingly congested and contested, and that trend presents challenges for the safety, stability, and sustainability ...*

*Already, the Department of Defense (DoD) tracks over 20,000 objects in space, and ... makes notifications of potential conjunctions (that is, two or more objects coming together at the same or nearly the same point in time and space). ... As the number of space objects increases, however, this limited traffic management activity and architecture will become inadequate.*

*The future space operating environment will also be shaped by a significant increase in the volume and diversity of commercial activity in space. Emerging commercial ventures ... are increasingly outpacing efforts to develop and implement government policies and processes to address these new activities.”*

*... we must develop a new approach to space traffic management (STM) that addresses current and future operational risks. This new approach must set priorities for space situational awareness (SSA) and STM innovation in science and technology (S&T), incorporate national security considerations, ... establish an updated STM architecture, and promote space safety standards and best practices across the international community.”*

*The United States recognizes that spaceflight safety is a global challenge and will continue to encourage safe and responsible behavior in space while*

*emphasizing the need for international transparency and space traffic management (STM) data sharing.”*

At the meeting at which he signed the policy directive on space, U.S. President Trump advocated a ‘Space Force’ as an independent and co-equal military branch. In August, Vice President Mike Pence proposed that the United States Space Force (USSF) would be a sixth branch of the U.S. military with a focus on all matters off-world, including procuring military satellites and defending U.S. spacecraft in orbit from attacks. However, as yet there are few specifics on what a USSF would cost or what it would mean in terms of weapons in space beyond “making sure we have the security in space to advance human space exploration.”

Meanwhile the Federal Aviation Administration (FAA) says it is on schedule to publish a notice of proposed rulemaking (NPRM) on 1st February 2019, reforming commercial space-launch regulations to make American launch sites, as well as American launchers, more attractive to the global marketplace. Some, including representatives of commercial launch providers, have expressed concern over the FAA process, citing a “lack of dialogue, insight, transparency and engagement” with industry but FAA say the pace of developing the NPRM justifies their lack of engagement. Evidently tensions between aviation regulators and those they regulate over consultation are an international phenomenon.

The UK government has also been outlining its ambitions for space. Sam Gyimah, Member of Parliament for East Surrey and the joint Minister for Higher Education at the Department for Business, Energy, and Industrial Strategy and the Department of Education was reported as saying in a recent interview,

“As technology evolves and reduces the cost of access to space, there is an exciting opportunity for the U.K. to lead in the New Space age” and, “The U.K. space sector was worth an impressive €13.8 billion in 2014 and 2015. It is growing fast and employs around 38,000 people. (Interestingly, this is the same number that UK General Aviation supported in 2015.) One fact that astounded me when I started as science minister is that Glasgow creates more small satellites than any other European city. Its satellites — sometimes as small as fizzy drink cans — are capable of everything from monitoring the biology of the ocean to helping African farmers increase their crop production.” The government’s modern industrial strategy (reference ) published in December 2017, set out a £50 million programme to enable new satellite launch services on top of the £99 million invested in building the National Space Testing Facility (though both figures were dwarfed by announcements in the same document of £385 million for UK’s digital infrastructure and an investment of £2.5 billion in low carbon innovation by 2021). At the Farnborough International Airshow the government announced Sutherland in Scotland as the first ‘vertical launch site’ (not to be confused with helicopter and drone ‘vertiports’) together with an indication that other sites were also under consideration. To protect the U.K. public, the Civil Aviation Authority (CAA) intend to have the required regulatory frameworks in place, accepted by government and supported by the appropriate legal instruments, to enable initial spaceflight operations to commence in the UK by 2020.

## BREXIT – WHAT DOES LEAVING WITHOUT AGREEMENT LOOK LIKE?

I promised myself not to mention Brexit this issue but, to balance my article in the last, reference explains how things could carry on next year in the absence of an agreement to remain within EASA.



## MAG2TRUE

Nav Canada presented their paper on changing to navigation by a fixed reference point (True North) at the ICAO 13th Air Navigation Conference. The paper (reference ) concluded with, “Recommendation 3.5/X True North Reference System – That the Conference request that States and regions adopt a True North reference system by 2030.” The paper was well-received with general support, the only negative being some concern that 2030 was much too soon to implement such a major change(!) An ICAO working group has been set up; we will do what we can to demonstrate that the hurdle may be more easily surmountable.

## AIRSPACE

A call for evidence to support an inquiry into UK airspace change closed at the end of October. The inquiry, instigated by the All-Party Parliamentary Group on General Aviation (APPG-GA – reference

), provided an opportunity to consider the roles of the Civil Aviation Authority as regulator and arbiter of airspace change requests and NATS, the UK’s major air navigation service provider and to reconsider some of the things we have taken for granted for so long. For instance, air traffic control (ATC) are quite comfortable to place two airliners head-on if they are separated vertically by only 1,000 ft (300 metres) yet when those same airliners are at the same height, ATC must keep them a minimum of 12,000 ft (2 nautical miles) and in some instances 30,000 ft (5 nautical miles), reflecting the historical accuracy of pressure altimeters installed in aircraft and the size of a blip on an air traffic radar display. In a world of modern navigation system accuracy (and data transmissions that provide both warning and flight guidance when separation is at risk), are those limits still sensible or necessary?

The inquiry will no doubt question whether shareholder relationships and

funding regimes might be construed as potential conflicts of interest in deciding airspace changes. The UK has experienced growing demand for ever larger tracts of controlled airspace because that has been the paradigm behind our approach to safety; there is no dispute that controlled airspace does protect aircraft operating within it. However, controlled airspace also pushes other aircraft that are forced to operate outside it into shrinking remnants of uncontrolled airspace with choke points that increases traffic density and reduce the safety by raising their risk of mid-air collision. Conscious that our members include commercial and GA pilots, our response – and any subsequent involvement – will aim not to make airspace less safe for anyone but to make airspace safe and accessible to everyone (where everyone will include commercial and GA pilots and commercial drone operators who will need safe access in the future.

### REFERENCES (all links accessed 1 November 2018):

1. <https://www.whitehouse.gov/presidential-actions/space-policy-directive-3-national-space-traffic-management-policy/>
2. UK Industrial Strategy – A leading destination to invest and grow published 14 December 2017  
<https://www.gov.uk/government/publications/uk-industrial-strategy-a-leading-destination-to-invest-and-grow>
3. <https://www.gov.uk/government/publications/flights-to-and-from-the-uk-if-theres-no-brexiteal/flights-to-and-from-the-uk-if-theres-no-brexiteal#after-march-2019-if-theres-no-deal>
4. [https://www.icao.int/Meetings/anconf13/Documents/WP/wp\\_114\\_en.pdf](https://www.icao.int/Meetings/anconf13/Documents/WP/wp_114_en.pdf)
5. <http://www.generalaviationappg.uk>



*Reds in action*

# The Trophies and Awards Banquet

Guildhall 25th October 2018

By Assistant Paul Smiddy,  
Honorary Editor

The highlight of the Company's year again took place at the City of London's Guildhall on October 26th. At a meeting of the Court in the Crypt beforehand, the Master, Captain Colin Cox, witnessed the clothing of twelve new Liverymen. Wg Cdr Trasler, Professor David Allison, Ms Sue Ingle, Capt Patrick Sherrieff, and Messrs Ray Middleton, Jonathan Morton, Stephen Durrell, Clive Rose, Stephen Bridgewater, Alistair Beaton, Carl Boddy, and Sidney Kwong, were all welcomed into the Honourable Company as fellow Liverymen.

The Master also presented Master Air Pilot certificates to Garry Sampson, Ray Smith, Rear Admiral Keith Blount, Major Marc le Gresley, Ronald Lawford, Lt David-John Gibbs, Ian Thompson, David Hughes, Christopher Marren, and Flt Lt Keith Frewin, and a Master Rear Crew certificate to Petty Officer Laurence Slater.

After the Court meeting members and guests proceeded to the champagne reception in the Old Library, with the Pikemen and Musketeers of the Honourable Artillery Company in their familiar guardian angel role. As is usual they appeared of particular interest to our overseas visitors.

Our Guest of Honour was Baroness Sugg, Minister of Aviation. Other senior guests included the Masters of the Coachmakers and Coach Harness Makers, Merchant Taylors and Master Mariners. Lt Gen Richard Felton, Commandant of the Army Air Corps, Col Jon Bryant (Comdt Army Aviation Centre), Gp Capt Tony Franklin (Comdt CFS), Rear Admiral Jonathan Pentreath (Comdt Joint Helicopter Command), and Gp Capt Howard Edwards (OC 6 FTS) were the senior UK military representatives. The rotary world was, therefore, very well represented indeed! We were also honoured to have as guests the air advisors to the NZ and Canadian High Commissions.

The Beadle, Ted Prior, led the Master and senior guests into the Great Hall for dinner, with the Guest of Honour having



just made it in time. After Grace enunciated in customary style by our Honorary Chaplain, the Reverend Peter Mullen, the Master invited the newly-clothed Liverymen to stand and be recognised. With vigorous music from the London Banqueting Ensemble, and very efficient service by the Guildhall's catering staff, the meal passed at pace. After the sung Grace, the Loving Cups were circulated, followed by toasts to Her Majesty the Queen, the Royal Family, and the Lord Mayor and the Corporation of the City of London. The trophies were awarded by Baroness Sugg. Whilst the Clerk as usual prefaced each award with an abbreviated citation, the full version can be found on the Company's website.

After the presentations the Master addressed the multitude, and gave a particularly warm welcome to those who had trekked from overseas. Perhaps it was my imagination, but the Hong Kong contingent seemed larger than normal! Colin paid tribute to the work of Past Master Roger Gault who "has worked tirelessly with colleagues on the Aviation Industry Skills Board with a view to establishing a First Officer pilot apprenticeship programme." He noted that "the main challenge is that the Institute for Apprenticeships has proposed a funding band of just £4,000, which goes nowhere near the full cost of pilot apprentice training which is upwards of £150,000 per individual. The current apprenticeship funding rules do not allow for individuals to make a financial contribution to their training and therefore employers would be expected to foot the remaining bill. In reality employers will not be able to cover these costs alone, and therefore

take-up of the new first officer pilot apprenticeship will be minimal at best." Leaving the guest of honour some further food for thought, he added "I wonder, Baroness, if you might take another look at the paper presented for consideration back in July which highlights the problem." The Master noted the achievements of our trophy recipients, and proposed the toast to our award winners and guests.

Baroness Sugg then rose to give her state of the nation address. She made a brief tribute to our armed forces, and regarding civil air transport she said that she "shared your commitment to helping the industry to ever more safety." She noted the challenges which will be posed by high rates of future passenger growth, and confirmed that the Government recognises the challenges of the growing shortage of trained pilots. She said, to much acclaim, that she would look again at our July submission. Her Department has been working hard on the new Aviation Strategy, and she hoped that the resulting Green Paper will be published in December. (The Government's last policy paper said it would be by early 2019). In addition she confirmed that HMG was working for a 'No Deal' Brexit scenario. She concluded by congratulating the award winners.

Full copies of her and the Master's speech can be found on the Company's website.

Afterwards the Stirrup Cup was well used in the Old Library giving a chance for many to offer personal congratulations to the award winners. A multitude then progressed to the Cowdray Room at the RAF Club.





*The Master & Denise welcome Mr & Mrs Howard Cook*



*The Editor's wife bows to the Immediate Past Editor's wife*



*The Master in exclamatory flow*



*PM John Hutchinson, with Sue and their family*



*Baroness Sugg & the Master in Loving Cup mode*



*The Guest of Honour responds*



*PM Rick Peacock-Edwards leading the RAF Club mafia!*



*The Master with fellow Masters and Baroness Sugg*



*Prizewinners from Air Forces from around the world*



*The Master with new Liverymen:  
Front Row – RL Middleton, JD Morton, SJ Durrell, the Master, DJ Allison, CH Rose, KF Trasler;  
Rear Row – SD Bridgewater, SM Ingle, AT Beaton, CSR Boddy, SS Kwong, PD Sherriff*



*The assembled throng before dinner*



**The full citations for all the award winners can be found on the Company website; here follows the abbreviated citations which were read by the Learned Clerk during the presentation of awards at the banquet.**

#### THE AWARD OF HONOUR



For over 50 years the Royal Air Force Aerobatic Team has been performing both in the UK and, at various times, in most countries around the world. The team is globally famous, they are ambassadors for the UK and they have, for so many years, been perhaps the most visible example of British expertise and excellence in aviation.

For their excellence and achievement throughout their more than 50 years of existence, the Royal Air Force Aerobatic Team is awarded the Honourable Company of Air Pilots Award of Honour in recognition of its enduring contribution to excellence in aviation.

#### THE DERRY AND RICHARDS MEMORIAL MEDAL



Liveryman Frank Chapman has been involved in flight test as an experimental test pilot since completing test pilot training with the French Ecole du Personnel d'Essai et de Reception (EPNER) in 1990.

Following fast jet training he flew both Harriers and F4 Phantoms on operational tours before an exchange

with the USAF as a test pilot. After the RAF Frank spent the next six years flying A320s and A330s as an airline pilot with Monarch Airlines. This experience was ideal preparation for the next stage of his career as in 2004 he was recruited by Airbus and joined the flight test team in Toulouse as an experimental test pilot.

In addition to his test flying, Frank is also an accomplished display pilot having displayed A350 and A380 at a number of commercial air shows, but also as a regular display pilot of vintage aircraft at the Shuttleworth Collection. For his dedicated contribution to aircraft design, development, and flight testing, both military and civilian, Frank Chapman is a worthy recipient of the Derry & Richards Memorial Medal.

#### THE ERIC 'WINKLE' BROWN MEMORIAL TROPHY



Roger 'Dodge' Bailey flew the C-130 in the RAF before attending the Central Flying School to train as a Qualified Flying Instructor, followed by the USAF Test Pilot School. He was eventually appointed the Officer Commanding Aerospace Research Squadron in 1988 before retirement from the Royal Air Force in December 1989.

After leaving the RAF he joined the then College of Aeronautics as Chief Test Pilot. He also manages the flying of the aircraft in the Shuttleworth Collection. He approached this whole, exceptionally diverse, collection of aircraft with the Test Piloting skills he had built up over so many years by re-designing the whole system of flying operations of the Collection's aircraft. He was also instrumental in keeping the Shuttleworth Collection viable following the Shoreham disaster by, again, using his Test Pilot background and meticulous preparation, putting in place revised procedures to secure the necessary permissions and implement the various changes required subsequent to that disaster.

For his commendable contribution to test and evaluation flying, Roger 'Dodge' Bailey is awarded the Eric 'Winkle' Brown Memorial Trophy.

#### THE JOHN LANDYMORE TROPHY



Amy Palmer won the Air Pilots Benevolent Fund PPL Scholarship and completed her training with Ulster Flying Club.

From the initial impression that she made upon the scholarship selection committee to the approach she adopted during her flying training, Amy was exemplary. Her ground school results were top class and her whole approach to the learning process and personal application required to be a proficient and able pilot were present from the outset. Amy's enthusiasm and determination to achieve her goal was evident to her ground and flying instructors. Her attitude was always positive and she was a pleasure to teach.

As a result of her personal qualities and professional, competent approach to flying demonstrated during her training for a PPL, Amy Palmer is awarded the John Landymore Trophy for 2018.

#### THE AWARD FOR AVIATION JOURNALISM



For nearly 40 years David Learmount has arguably been the most influential aviation safety journalist of his era. He served in the RAF for 10 years until he



lost his medical category as a pilot. He then joined Flight International initially as their Air Transport Reporter, but almost immediately took over the annual safety review, and wrote up operational news of all kinds – an area that really interested him. Two years later he was appointed Air Transport Editor and did that job until the new post of Operations and Safety Editor was created especially for him in 1992.

Over the 38 years he has served at Flight International both fulltime and now as a Consultant, his knowledgeable writing and in this digital era now his blog, have provided in depth analyses of the failures and remedies in commercial aviation. The quality of his research and writing during this time has made him a figure known and respected across the aeronautical world.

David's long and renown career is appropriately recognized by the Company's Award for Aviation Journalism.

#### THE SIR ALAN COBHAM MEMORIAL AWARD



In 2008 and 2009 Donna Farquhar played a pivotal role in establishing the Canadian Regional organisation for the Guild of Air Pilots and Navigators, followed by its expansion to the whole of North America. Her position as Administrator for the Honourable Company of Air Pilots North American Region continues today.

Donna is an invaluable force for continuity with Air Pilots NA by management of all the administrative functions and support to the Trophies and Awards submissions from the Region. Every regional Chairman has relied upon Donna since the Region was founded. Her career has been a unique and valuable contribution to aviation in British Columbia and North America.

For her very significant contribution both to the founding of the North American Region of the Air Pilots and

to the continuing close relationship and management of the Region, Donna Farquhar is awarded the Sir Alan Cobham Memorial Award.

#### THE SIR ALAN COBHAM MEMORIAL AWARD



Liveryman Barry Mitchell joined the then Guild of Air Pilots and Air Navigators in New Zealand in 1989, the year that the New Zealand Region was founded. He has been a life-long stalwart of the Region ever since.

Barry's flying career began as a pilot in the RNZAF before he joined Air New Zealand, where he flew until retirement age. Soon after joining the Guild (as was) he volunteered for the role of Regional Administrator in 1991 and has remained in that role, intermittently also being Chairman, Deputy Chairman and Treasurer at times. He has been instrumental in, and fundamental to the successful existence of the New Zealand Region – and, indeed, if it had not been for his obliging retention of his administrative role in recent years, the Region may have ceased to exist.

The New Zealand Region undoubtedly owes its continued existence to Barry Mitchell, who has given 28 years of selfless service to the Guild and Company in New Zealand. He epitomises the ethos behind the Sir Alan Cobham Memorial Award and is a most deserving recipient of the Company's recognition by this award.



#### THE GRAND MASTER'S AUSTRALIAN MEDAL



Jim Thurstan's aviation career began in 1955 as a Qantas apprentice engineer, and eventually retiring as a Senior Check & Training Engineer on the B747.

After retirement, he worked as a simulator instructor at Qantas for 6 years. However, in 1993 he became Senior Project Engineer on the Historical Aircraft Restoration Society's (HARS) Lockheed Super Constellation restoration in Tucson, Arizona. Then, in 2010, Jim Thurstan became the Project Engineer for the repair of a replica Fokker VIIb/3m "Southern Cross II", originally built to commemorate the inaugural trans-Pacific crossing by the original Southern Cross in 1928 and the largest reproduction aircraft in the world.

Under the guidance of Bill Whitney, designer of the SCII, and Captain Bruce Simpson, certifying engineer, Jim led the team through a complete engineering audit of the aircraft including modification to the tail area and repair of the airframe at the HARS facility at Illawarra.

Throughout this painstaking process, Jim's leadership, practical approach and exhausting research has enabled an aircraft considered iconic in the history of Australian aviation to once again be capable of taking to the air. For his innovation and methodology in aircraft engineering Jim Thurstan is awarded the Grand Master's Australian Medal.

#### THE AUSTRALIAN BI-CENTENNIAL AWARD



On retirement from the RAAF, Ian Mallett joined the then Civil Aviation Authority in the role of Airways Surveyor, with responsibility for

navigation procedures and aircraft separation systems. At this time the civil air transport world was beginning to investigate the potential for the civil use of the Global Positioning System under development by the US military, and this became Ian's special area of expertise for the following 25 years.

It was Ian's involvement in working groups and international expert panels of the International Civil Aviation Organisation that not only developed the systems and standards we now enjoy worldwide, but encouraged Australia to be a leading light in the process. Ian and others successfully developed the now-familiar patterns for three-dimensional navigation using a succession of precisely-defined points in space that could follow a curved or straight-in approach to a runway. These approaches allowed lower decision heights for most runways, and the ability to fly an instrument approach to runways that never previously had the capability for an instrument approach.

For his work in developing these international standard procedures and increasing the safety and accuracy of aerial navigation, Ian Mallett is awarded the Australian Bicentennial Award.

#### THE MASTER'S COMMENDATION



Group Captain Middleton has given a lifetime of service to the Royal Air Force and is currently the longest serving and oldest officer in uniform. He enjoyed a successful and long career in several high-profile staff appointments, in his final role, John was appointed as the Commandant of 2 Flying Training School at RAF Syerston, responsible for the delivery of cadet gliding at 25 Volunteer Gliding Squadrons. Sadly, within 3 months of assuming command, flying for the entire glider fleet was paused due to technical assurance concerns. During this time and for the next four years John initiated an annual Aerospace Camp at Syerston for cadets to experience a wide range of aerospace STEM activities and also advocated the

establishment of a privately-funded, state-of-the-art Aviation Academy also at Syerston.

In sum, John Middleton's legacy is enduring as is his unerring belief in the power of flight to inspire. In recognition of his long and distinguished career, he is awarded the Master's Commendation.

#### THE MASTER'S COMMENDATION



Sqn Ldr Mike Ling is the longest serving Red Arrows pilot, including 6 years as Red 10. He has landed a red Hawk in 46 countries, been involved in 699 displays, flown 2,585 flights and was recalled to the team for the 2018 season as Red 3 following the tragic accident earlier this year. But it is for his role as Red 10 that he is renown - promoting the best of British science, engineering and education around the world and his tireless dedication to using social media to highlight the work of the team, often with eye-catching photography.

Red 10's job is crucial because it also entails ensuring nothing untoward is going to affect the team such as airspace infringements, and to act as the go-between linking the team and the display director as well as commentating during the display itself.

In recognition of his dedication to duty and tireless support for promoting the Red Arrows and the 'Best of British' abroad, particularly embracing the opportunity social media presents to reach new audiences, Squadron Leader Mike Ling is awarded the Master's Commendation.

#### THE MASTER'S COMMENDATION



Major Scharf joined the RCAF in 1991 and in a career that spans 27 years, he has dedicated himself to advancing the RCAF's Search and Rescue programme with over 7500 flight hours and 117 operational SAR missions.

In the 20 years of SAR flying, Maj Scharf would spend an estimated forty thousand hours on call, ready to take-off in as little as 30 minutes "so that others may live". He has also flown aid and relief missions in Tanzania, Honduras and in Louisiana following Hurricane Gustav which had stranded millions.

In spite of his impressive operational achievements, Maj Scharf's biggest impact to the RCAF SAR programme has come through his devotion to excellence in both flight instruction and safety. He has been instrumental in the formation of both individual SAR pilots as well as in the development of entire SAR crews, and was influential in the development and implementation of the RCAF Human Performance in Military Aviation Programme which is now used Air Force wide to ensure increased operational effectiveness through individual and team performance training.

Major Scharf has demonstrated a passion and commitment to SAR through both his operational and instructional attention. A leader, innovator and mentor, his achievements are more than deserving of recognition and he is accordingly awarded the Master's Commendation.





#### THE SIR BARNES WALLIS MEDAL



In March 2017, AVM Simon 'Rocky' Rochelle initiated a paradigm shift in the application of air and space power. In delivering what is now known as 'Project Primus', Rocky has transformed the Ministry of Defence's space capability and standing across the space community.

Rocky's innovative approach has been underpinned by unmatched energy, a willingness to take risk, empower subordinates, and an advocacy for disruptive thinking. Rocky's vision to energise the RAF's space ambition has inspired colleagues, industrialists and international partners and has necessitated Ministerial engagement, international stakeholder management, and the mentoring of Defence's emerging space cadre.

Whilst 'Project Primus' was initiated to design, develop, deliver and operate a future warfighting constellation of small-satellites, an enhanced space operations centre fuses data from multiple sources and delivers warnings, forecasts and analysis to a variety of customers across Defence and other Government Departments. As a result of AVM Rocky Rochelle's efforts, the Royal Air Force finds itself at the forefront of thinking on acquisition agility, disruptive thinking and innovation. AVM Rocky Rochelle is accordingly recognised for his innovative approach and individual and exceptional contribution to aviation by the award of the Sir Barnes Wallis Medal.

#### THE HANNA TROPHY



Lee Proudfoot's skill and maturity were recognised very early by the flying display community and consequently Lee first started display flying at air shows in 1988. During the early 1990s he also started to fly and display vintage aircraft and his flying was quickly rated as outstanding for both content, safety and a sympathetic appreciation for the age of the aircraft. He took a permanent position with the Breitling Fighters formation display team for 4 years flying first the Spitfire and then the Mustang aircraft. He has displayed many different types of vintage aircraft including various marks of Spitfire, Hurricane, Bearcat, Wildcat, Hellcat, Thunderbolt, Blenheim, Mustang and Lysander. He has flown more than 12,000 hours in over 60 different types of aircraft.

On the ground Lee Proudfoot is modest and not given to extravagance in any way, but in the air he displays with precision, flair and passion, qualities that are clearly identified with the Hanna Trophy, of which he is accordingly a very worthy recipient.

#### THE JOHNSTON MEMORIAL TROPHY



700X Naval Air Squadron formed at the outbreak of World War Two and initially operated catapult launched float-planes from battleships at sea; in peacetime, it took on the mantle of an Intensive Flying Trials Unit (IFTU) and over the years has brought the majority of the Fleet Air Arm's frontline fixed and rotary wing aircraft into service.

Up until 2017, and in its latest guise as a small unit of only fourteen permanent staff as the Royal Navy's only Unmanned Air Vehicle (UAV) unit, 700X Naval Air Squadron was charged with operating the catapult launched Scan Eagle Reconnaissance Maritime (SERM) UAV from Type 23 frigates and, having flown in excess of 2700 hours from eight platforms over a three year period, the Squadron proved the utility, capability and flexibility of unmanned air systems at sea, laying firm foundations for the

provision of future UAVs in naval service. 700X Naval Air Squadron has provided the delivery aspect in what has been a paradigm shift in Fleet Air Arm involvement with unmanned aviation. Their drive in turning the Urgent Operational Requirement of ScanEagle into a deployed reality has been the key in re-opening eyes to the capability and potential of the UAV in the maritime and littoral. They have established themselves as the pan-Defence Centre of Excellence for Class 1B UAS.

700X Naval Air Squadron members' outstanding efforts in the pursuit of unmanned air capability at sea and in the wider defence environment personifies their determination, flexibility and 'can do' attitude and make them worthy recipients of the Johnston Memorial Trophy.

#### THE CUMBERBATCH TROPHY



Mike O'Donoghue had a distinguished career in the Army Air Corps as a pilot, flying instructor, commander and staff officer. His final appointment was as Commandant of the Tri-Service Defence Helicopter Flying School at RAF Shawbury. Following his retirement Mike was appointed as the Chief Executive of GASCo in 2010.

The enormous strides made by GASCo over the past eight years and the very high regard in which it is held by the GA community is very much due to the commitment, hard work and interpersonal skills of an outstanding Chief Executive. However, his most impressive achievement has been in the field of GA flight safety where his contribution has been outstanding. Shortly before he joined GASCo the CAA had announced that it was to stop direct involvement in organizing and running their Flight Safety Evenings (FSEs). The GASCo Board decided that FSEs were an important part of flight safety and therefore GASCo successfully

negotiated with the CAA to continue running FSEs under contract. On taking over as CE Mike's immediate task was to recruit Regional Safety Officers (RSOs) to cover the country and to devise a GASCo format for the FSEs. This he did with such energy and enthusiasm that seven RSOs were quickly recruited and trained and year on year the number of FSEs increased to well in excess of the number contracted to the CAA. One has even been delivered in Australia where a RSO, whose day job is as an airline pilot, had a stopover.

For his outstanding contribution to aviation safety, during an extensive aviation career, Mike O'Donoghue is awarded the Cumberbatch Trophy.

#### THE SWORD OF HONOUR



Gerry Hermer's career in aviation has spanned more than 5 decades. He began as an Engineering Officer in the Royal Air Force before training as a Search and Rescue pilot. Following a distinguished military career Gerry established two successful aviation businesses based in Norwich and was the driving force behind the establishment of the first Norfolk Police Helicopter Unit in 1990.

In 1996 Gerry went on to start the East Anglian Air Ambulance (EAAA). With his experience in Search and Rescue, Gerry recognised the potential of a helicopter-based medical service. Working with a small group who shared his vision, he developed the service from scratch. The first aircraft began flying in 2001, one day a week. Gerry continued to supply aircraft and pilots for over 10 years, often flying the Air Ambulance himself. Working as both a pilot and a supplier, Gerry was acutely aware of the requirements and demands placed on the aircraft and its crew. This allowed him to develop HEMS focussed procedures and techniques as well as address safety issues at a national level. Much of his early work set the foundations for the success of the UK's HEMS sector today.

At a national level, Gerry's commitment to the UK air ambulance community has been extraordinary and unequalled. It was Gerry's expertise, energy, and tenacity which was pivotal in coordinating the inputs of the aircraft contractor and UK Civil Aviation Authority in order to introduce safely, night HEMS missions in May 2013, a new operational capability to the UK.

Gerry has only recently retired, having worked into his 70th decade. For his outstanding contribution to General Aviation, Gerry Hermer is awarded the Sword of Honour.

#### THE SIR JAMES MARTIN AWARD



Dr Donough Wilson is innovation lead for advanced artificial intelligence focused military and civil future cockpits, and augmented intelligence cyber-physical flight control, mission management and combat management systems, at aviation and defence innovation consultants, VIVID/futureVision.

His passion is aviation safety and his contributions to the future of global aviation safety and cockpit design have been significant. In a research and development programme spanning, to date, over eighteen years, he was the first to challenge long held aviation legacy conventions when defining the five intrinsically linked factors inherent to all controlled flight into terrain (CFIT) and loss of control (LoC) aviation disasters. This work highlights and addresses the causal issues underpinning the frailty of human decision making when in unnatural and alien environments such as a violent, turbulent, tropical thunderstorm in IMC at night. This work explains the root physiological human factors causes of 'pilot error' – with two key outcomes being that cognitive failure (and the associated bewilderment), are factors in all fatal CFIT and LoC incidents; and that they

are not a reflection of an individual's weakness or failing. When certain events conspire, every human, including every pilot, could be susceptible to the physiological factors causing CFIT or LoC.

His latest work in future 'shared intelligence' digital cockpits where pilot, cyber-physical technology, and AI work as a team to ensure optimum 3D flight, mission delivery, and approach accuracy; optimum fuel economy; minimum environmental impact; and above all, absolute flight safety, continues to present game-changing thinking to develop next-generation aircraft which provide absolute passenger safety and eliminate any potential for CFIT or LoC.

For his outstanding practical contribution leading to the safer operation of aircraft, Dr Donough Wilson is awarded the Sir James Martin Award.

#### THE CENTRAL FLYING SCHOOL TROPHY



For the past 36 years Sqn Ldr Benson-Cooper has dedicated his military career to the continued development of multi-engine fixed wing pilot training in the RNZAF, mainly with 42 Squadron.

For many years Sqn Ldr Benson-Cooper has been the lead A-Category flying instructor for the Squadron, acting as a Central Flying School agent in assessing the instructional standards of the unit's flying instructors. He remains an expert in flight instruction specific to multi-engine flying and his instructional techniques have solidified into Squadron documentation which are now taught to every Squadron flying instructor.

Nearly every serving fixed wing pilot has at some point in their careers been instructed by Sqn Ldr Benson-Cooper. His name is synonymous with flying instruction in the RNZAF and is normally the first reference in multi-engine fixed wing instruction. His commitment is unyielding, and his



influence will continue for many years beyond his eventual departure, making Squadron Leader John Benson-Cooper a worthy recipient of the Central Flying School Trophy.

#### THE CENTRAL FLYING SCHOOL TROPHY



Over the last 10 years 653 Sqn has trained and prepared all Apache aircrew for immediate deployment, initially on Op Herrick, and then to hold the highest readiness for tasks across the spectrum of warfare, at the heart of Army and Defence capability.

Success is a result of ethos, and its unrelenting pursuit of excellence has been critical to the Sqn winning the numerous battles facing any training organisation in uncertain and austere times. 653 Sqn attracts vocationally driven and dedicated instructors with deep operational experience in all environments. The Sqn provides experts on Weapons, Electronic Warfare and Tactics, Techniques and Procedures.

Innovation has been critical to success. Simulators have been networked and pushed hard to expose crews to the most challenging of threats, missions and environments. Innovation has also been shown by delivering flying instruction using a mix of QHIs and non-CFS Weapons and EW instructors – exploiting the freshness of frontline aircrew instructors and leaning on the supervisory and instructional skills of CFS trained QHIs.

The pressure on the Sqn to deliver has been relentless. The Sqn has never failed – it absorbed the pressure placed on it with stoic humour, prioritising and showing incredible flexibility in the face of financial, manning, weather, serviceability and Air Transport challenges. The Sqn has an impeccable safety record and was recently graded very highly by the CFS Agents in Army Aviation Standards. 653 Sqn's professionalism and work ethic have been

exceptional and its contribution remains utterly critical to the current and future success of the AHF. It is accordingly awarded the Central Flying School Trophy.

#### THE GRAND MASTER'S MEDAL



Captain Horrell has made profound contributions to the 661st Aeronautical Systems Squadron as a Developmental Engineer and serves as the squadron's Quality Assurance Flight Commander. Among his many achievements, Captain Horrell was appointed to lead a 44-member quick reaction team to create, validate, and field a \$465K counter-unmanned aerial system capability in under 4 months. He also vetted an improved Line-of-Sight video downlink on three HH-60 helicopters, enabling aircrews to transmit situational awareness video to facilitate rescue and recovery of downed Airmen. He led an effort and remedied a traffic clearance and avoidance system technical assistance request within 30 days, personally flying over 30 flight test sorties and earning his first aerial achievement medal. Finally, Captain Horrell created the squadron's first joint forces electronic warfare exercise which, during one month, tested every aspect of electronic attack principles and theory. The new lessons learned, tactics, techniques, and procedures became the foundation for new USAF electronic warfare doctrine.

For his outstanding achievement and endeavour in a number of fields of engineering and flight testing, Captain Horrell is awarded the Grand Master's Medal.



#### THE GRAND MASTER'S COMMENDATION



The widespread media coverage for the UK's response into the devastating impact of Hurricanes Irma and Maria in Sep 17 would show a largescale military response, spearheaded by HMS Ocean. However, prior to her arrival there was a single UK asset on station, RFA Mounts Bay, with her sole Wildcat HMA Mk2 of 216 Flight 815 NAS embarked. The exceptional work of this small team cannot be understated and the success of the onward operation of 'Op Ruman' was only achieved by the extraordinary effort and work they delivered. This was a whole flight achievement, with 216 Flight collectively deserved of recognition. However, 2 individuals were key to this team's success; Lt Amy Gilmore RN (Flight Commander) and CPO Ian Toms (Flight Senior Maintenance Rating).

Under Lt Amy Gilmore's leadership and motivation, 216 Flt was able to fly for over 90 hours during the operation with 100% serviceability achieved, covering 60 sorties and four countries, and having a real and measurable effect on the lives of those affected by Irma and Maria. In total, her Wildcat – the first to ever deploy to the Caribbean JOA for disaster relief operations, and the only UK aircraft operating in theatre in the early stages of 'Op Ruman' – delivered over 37 tonnes of fresh water, food, medical supplies and building materials for shelter construction, as well as conducting over 250 personnel transfers, in a hot and humid environment – all on her first deployment as Flight Commander.

CPO Ian Toms directed a small team of 9 engineers in achieving unprecedented operational Wildcat serviceability whilst embarked on RFA Mounts Bay as the Flight Senior Maintenance Rating (SMR). His meticulous planning of aircraft maintenance and organisation of manpower requirements, coupled with his ever-enthusiastic leadership, resulted in ZZ530 achieving over 90 flying hours over the course of 29 days, with a 100% serviceability rate. Vitally, CPO Toms was

able to grasp instinctively the importance of fatigue management and despite the operational pressures and inevitable intensity of activity, initiated numerous safeguards for the team.

These two key individuals, representing the whole of 216 Flight, are deserving recipients of the Grand Master's Commendation for outstanding service in the air.

#### THE HUGH GORDON-BURGE MEMORIAL AWARD



As the Royal Danish Air Force (RDAF) Merlin Exchange Officer, Flight Lieutenant Ben Wallis was conducting a night instructional conversion course sortie on 16 March 2016 consisting of low level handling, navigation and landings and take-offs from confined areas. On departure from a confined area within a forest, just after raising the landing gear, the crew heard a loud bang, felt a jolt and the aircraft experienced a sideways yawing moment. The aircraft instruments displayed zero power reaching the aircraft rotors and a correspondingly low rotor speed, indicative of a complete and total mechanical failure of the drive to the main gearbox from all three engines. Wallis immediately recognised the severity of this catastrophic and terminal emergency and initiated an aggressive flare from only 80 knots and at just 120 feet above the trees.

These prompt actions had a rapid and likely life-saving effect, increasing the rotor speed from below the minimum emergency limit back to within the normal range. In addition, Wallis had the capacity and foresight to turn the aircraft to the right in an attempt to land in a clear area, despite being below the minimum altitude at which such a manoeuvre would normally be

attempted. At just 30 feet above ground level, he straightened up the aircraft and conducted a full auto-rotative engine-off landing coming to rest on a downward slope after approximately 50 metres. The Flight Data Recorder indicated that from onset of the failure to wheels down was just 15 seconds.

Wallis' almost immediate and accurate assessment of the situation, its severity and ultimately the terminal nature of events displayed capacity and captaincy of the highest order. Likewise, his subsequent immediate and correct recovery actions, at night, and with a student pilot in the other seat, displayed exceptional handling skill and leadership under pressure. The fact that this emergency was an extremely rare occurrence, which occurred at night, over difficult terrain, and on an instructional sortie, makes his actions in saving his aircraft and crew truly remarkable. Flight Lieutenant Wallis' exceptional skill as a pilot, instructor and aircraft captain undoubtedly saved his aircraft and the lives of all the crew. He is accordingly awarded the Hugh Gordon-Burge Memorial Award.

#### THE PRINCE PHILIP HELICOPTER RESCUE AWARD



Typhoon Hato hit Hong Kong on 23 August 2017, bringing a No 10 signal and severe weather conditions to the region. At 1315L GFS was informed by the HK Maritime Rescue Coordination Centre (MRCC) that multiple distress signals had been received from an area of the South China Sea some 30 km SW of Hong Kong. Only later did it become clear that 17 vessels had reported being in distress, with over 100 crew requiring assistance. Over the course of the next

two days GFS launched 16 helicopter and 5 fixed wing missions, eventually rescuing 50 survivors in gruelling conditions from 6 vessels that had sunk or were aground.

After hours of rescue operations, and given the appalling conditions and hazardous environment, the decision was made to suspend the operation overnight. Mindful that more lives could be at peril, however, the operation resumed at first light on 24 Aug, with one Super Puma arriving on scene at 0530 to conduct a full search of the area. Nine more survivors were located and rescued from stranded vessels and rocky shorelines and returned to GFS, bringing the total saved by helicopter to 50 persons.

This was an unprecedented rescue operation in the recent history of the region, involving multiple distressed vessels and large numbers of survivors. The rescue crews had to contend with severe weather and a hazardous environment, making decisions based on fragmented information. Despite these obstacles, all rescue crews involved displayed exemplary skills, professionalism and coordination to save 50 lives. Multiple helicopters and crews were involved in this extensive rescue operation and, accordingly, the entire Hong Kong Government Flying Service is awarded the Prince Philip Helicopter Rescue award in recognition of its combined performance and the outstanding devotion to duty demonstrated by all its crews.





# Sir Frederick Tymms Memorial Lecture 25 September 2018

*Wing Commander Mark Jackson, OC XIII Squadron*

## The UK Reaper Force

**By The Editor, All photos courtesy MoD – Crown Copyright 2018**

The Master welcomed members and masters of 28 other livery companies to the new venue for the Tymms lecture – the Ballroom (shortly to become the Sovereign's Room) at the RAF Club.

A Tornado GR4 pilot by background (latterly as a Flight Commander on 617 Sqn), Mark was then posted to 16 Air Assault Brigade HQ in Afghanistan, and has been OC of Waddington's XIII Squadron since March 2018. It is one of Waddington's 2 squadrons operating the General Atomics MQ-9A Reaper, and he was therefore ideally placed to brief us on the UK's current deployment of the considerable assets of Remotely Piloted Air Systems (RPAS) – the preferred name in RAF terminology.

Mark acknowledged that many laymen would have gained their knowledge of RPAS operations from the film *Eye in the Sky*, and judged that it presented a fair portrayal of the decision-making process up the chain of command. The UK's current main asset, the MQ-9A Reaper, entered service with the US Air Force in 2007. It was procured by the UK's MoD under a UOR, and entered service with a reformed 39 Sqn in March the same year. Its first sortie was 15 months later. XIII Sqn was reformed in October 2012 at RAF Waddington, whilst 39 Sqn (together with 54 Sqn, the OCU) operates from Creech in Nevada. Clearly satellite comms are crucial to the operation, and there is a 2 second delay in upload/download. In RAF service the Reaper has a 3 man crew, and the pilots currently come from all aircrew backgrounds. The other two crew members are the Sensor Operator and the Mission Intelligence Co-ordinator. Crew need to take multi-tasking skills to a new level, since comms can be established with a large number of other in-theatre assets.

The Reaper is surprisingly large – its wingspan is wider than that of a Typhoon for example. Typical cruise is 120 kts, with a maximum mission time of 20



hours, which obviously necessitates crew changes. It carries a healthy load of ordnance – well unhealthy for those on the receiving end! Mark described the acuity of its imaging systems. Progress in this field in Western air forces has been quite striking in recent years. Its Synthetic Aperture Radar is used intensively.

The training programme for RPAS operators has been subject of much debate; Mark noted that he currently has seven RPAS(P), that is to say 'aircrew' streamed RPAS ab initio. They will have had 50 or so hours Elementary Flying Training in aircraft, together with 50 hours in the sim. The EFT work is in the UK, after which they complete the Formal Training Unit at Holloman AFB in New Mexico. This comprises 100 hours (mix of live and synthetic) on the MQ-9, after which they gain limited combat ready status with 54 Sqn at Creech AFB, Nevada before they are sent over to Waddington. The MIC complete a bespoke training package on 54 Sqn only, before their front line posting.

The bulk of the Reaper Force's tasking is ISTAR-related, this requires "huge concentration". There has been no shortage of missions in the Middle East in recent months, and Mark clearly feels

his men and women earn their keep.

The Force is already facing serious retention problems: so far this is a result of burn-out as a result of the intensity of operations. Looking forward he can envisage contractor RPAS/drone operators taking a shine to his experienced crew. History shows that the Service struggles to match contractors' packages.... Aircrew need some proper R&R every 4–6 months to avoid this burn-out. Despite living with family near Creech or Waddington, Mark does not under-estimate the stress of the RPAS operator lifestyle on crew and their families. In his view there is scope for greater consideration of through-career planning for his men and women. He was a very good promoter of the utility of Reapers: they are very deployable, and require a limited support "tail" relative to normal squadrons.

Mark then looked forward to the next generation of airframes. The MQ-9B Protector has a current projected in-service date of 2024, and first crews arriving in Autumn (or should that be "Fall"? ) 2019. The Protector has much greater endurance – those who attended this year's Farnborough may recall one landed from the USA with enough fuel remaining to return straight home! It will

also have anti-icing capability – allowing in UK airspace.

Mark ably fielded a rush of enthusiastic questions. He noted the intricacies of airspace deconfliction with Russia over Syria, with a stack (of upwards of 25 aircraft, supporting multiple ground commanders, separated by 500') that makes the London TMA look like child's play. He pointed out that Reaper-experienced senior officers were now moving up the chain of command (e.g the Station Commander at Waddington). Possibly this is aided by the fact that Reaper operations are subject to "greater oversight of the chain of command than any other weapons system".

Master Elect Malcolm White proposed the vote of thanks and said he was looking forward to the day when, firstly "a RPAS flew down the Mall on the Queen's Birthday", and secondly, when "Mark and company get proper recognition".

We should be very grateful that Mark gave such a full, frank and fascinating description of his unit's activities and plans. It was much enjoyed by members and our guests.



*Photo by Freeman Will Eeles*





# Her name was Casey...

By Assistant Dacre Watson

Her name was Casey and she was eight years old; as she walked towards me standing by the Tripacer holding her mother's hand, I could see that she had that beautiful translucent skin and soft hair which told a history far more effectively than I could ever describe.

Both Casey and her mother were due to fly with me and before we did so I thought that we ought to have a chat about it. It quickly transpired that neither of them had ever been in an aeroplane before, let alone a Tripacer of vintage status, so I explained how noisy it might appear to be; we might bump about a bit as we would be flying quite low, the upside of this being that we would have a better view of the lions at Longleat. She nodded gravely and said that would be alright. Would she like to sit in the front with me or in the back with her Mother? She thought the front would be fine.

We got airborne from Henstridge 's R/W 25 and after a slow climbing left turn on to north we levelled off at 1500 feet; would she like to fly the aircraft? Her eyes widened as she turned to check that she had heard correctly; I said that I would talk her through it and it would be fun. Well, she flew it beautifully and as she slowly realised what she was doing, a smile appeared followed by a wide grin. As we approached Longleat she wanted to see the lions so would I fly it, please? And once we were on our way back she asked if she could fly it again. I suggested

that she might like to follow me through on the controls all the way in to landing and she seemed to think that to be entirely reasonable, so we did it together.

I did another four sorties that day, flying youngsters and their parents, different ages and at different stages of their lives. Finally, at the end of the day I flew back to Oaksey, tired and emotionally exhausted so I decided to fly back at 6000 feet in order to avoid the low level turbulence from a hot and humid day. Notwithstanding that storms were forecast, it was a beautiful, calm evening and I was overwhelmed by a powerful sense of serenity which even today I am at a loss to explain, but I put it down to the extraordinary events of the day. A long and gentle descent into Oaksey, the turbulence gone, and the sense of being at one with the aeroplane, left me happy and content with life to an unusual degree.

Four days later, with exquisite irony, we received a call from our daughter advising us that her son, our 7 year old grandson, had developed a lump on his left jaw and was being referred to Great Ormond Street Hospital; the prognosis was not good. To cut a long and harrowing story short, young William is now home again and making a recovery and with that same sense of stoicism and optimism which I came across at Henstridge and which I found to be so humbling.

I would be the first to admit that it needs such events for one to become more aware of such places as Great Ormond Street Hospital for children. Some of you may have read Chris Spurrier's excellent account of the day at Henstridge in the last issue of the Air Pilot. In the same issue, in the Master's message, Colin Cox draws attention to the incredible work which takes place at this unique London hospital, both in research and the more practical way of caring for children and, as far as possible, curing them.

Cancer is a dreadful word: it strikes fear into those who come into contact with it and I cannot imagine that there is anyone reading this who has not in some way been touched by it, either through friends or family, and sometimes with tragic outcomes. I can only express the utmost empathy and sympathy for those who have lost friends and loved ones. But there are so many more these days who do go in to remission than ever before, and I am convinced that these figures will improve with further research.

I am aware, though, that for those in remission there is always the elephant in the room. He is, in my imagination, a kindly fellow - courteous and well dressed, probably with reading glasses as he reads the Times in his armchair, but he is utterly dispassionate in his work, and only leaves the room when it is all over.

I am fortunate that I have always had a very deep and simple faith, and with faith comes hope. It was a very hot day at Henstridge when we flew those children; someone had thought to put out a water sprinkler on the grass and it was quite obvious that for these children, far more fun than flying was the opportunity to run through the sprinkler all day. Simple pleasure, simple hope.

*Editor's note: donations to Gt Ormond Street can be made via  
<https://www.gosh.org>*



# Modular or Integrated? The verdict may surprise you...

By Associate Georgina Millington

Modular, integrated. Integrated, modular. I think I can safely say that those of us wanting to become pilots, who choose not to go down the military path, are all too aware of the great debate about which route is the best. The answer? There is no right or wrong, but without any doubt, for me it's modular.

I spent a vast amount of time looking around integrated schools, and noted that my parents were being told that it's totally normal to remortgage one's house or do equity release to fund my course. It goes without saying that, being retired, they, like me, felt uneasy about this option.

I am exceptionally lucky that Aviation South West, based at Exeter Airport, is just down the road. Having chosen the modular approach, I am able to continue working whilst tackling the Direct to First Officer course. So far I've been impressed with the professional attitude and excellent instructors at the school. Being small, here the Ground School classroom size averages 8 students (versus typically 30 at the integrated factories), I feel I am much more than just a number and I really like the personal approach to my training.

This makes the world of difference for so many reasons. Firstly, knowing all too well that my peers and I will eventually be applying for the same First Officer jobs as those at far larger integrated schools, our instructors understand us on an individual level – meaning that any areas needing a little more work will have been well and truly ironed out. To the airlines employing low hour cadets reading this, you can be sure that a modular student has been taught how to fly really well, and has developed their competencies in all areas. All training will be completed to the required standard and unlike some, there will be no spoon-feeding through ground school as all, like myself, will be working hard as well as studying throughout my training.

There is also the opportunity to gain a Direct to First Officer role within 15 months (possibly even earlier) via the modular route, with the advantage of no holding pools or such like at the end. Yes, you aren't guaranteed a job at the end of it like with the MPL programmes but if you look at the small print closely you're not in fact 100% guaranteed a job even at the end of one of those courses. It all depends on the airlines' business needs at

the time.

Moreover, I personally think it is great to be exposed to the great British weather for the flying part of the course. Don't get me wrong, moving abroad to the sun and warmth does sound on paper really very appealing. However, when push comes to shove, it's the ideal opportunity to learn how to tackle strong winds, cloudy skies, wet weather and all the other fun conditions that might be thrown at you. After all that is what flying is all about – fun and challenging.

The end result? You get the same licence as those who have done the equivalent course at an integrated school which is a Frozen ATPL; except with one difference, it costs half the amount. So for me this route is a no brainer!

Georgina is happy to discuss this article and her experiences with would-be ATPL students, and can be contacted via



**[Georgina\\_millington@hotmail.com](mailto:Georgina_millington@hotmail.com)**

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## The fruits of a scholarship

By Fred Bull

It is now approaching one year since generous funding by the Honourable Company of Air Pilots allowed me to commence training for my BGA Basic Instructor (BI) rating. I would like to take this opportunity to reflect back over what I've achieved in the past year and thank the Air Pilots and the BGA for providing me with the funding which allowed me to complete my Basic Instructor rating. I reflect below on the training I undertook, and on the

subsequent flying experiences it provided as an instructor, as well as reaching a significant milestone towards fulfilling my career ambition of becoming a commercial airline pilot.

Having completed the pre-BI course checklist, the Chief Flying Instructor (CFI) of the Scottish Gliding Centre, Mike Carruthers, arranged for a Basic Instructors course to be run at the Scottish Gliding Centre, by regional examiner Kate Byrne, for Martin

Phillimore (another BI candidate) and I. The course was scheduled to be completed over the weekend of the 9th and 10th of December. With just over a week to go, Kate emailed Martin and I with an overview of the course. Day One was to focus on our own flying skills and dealing with awkward situations while Day Two focussed on Instructing as a BI, with five hours of lectures in the briefing room on each of the two days.

In the week leading up to the course I was balancing a mixture of nerves and apprehension with pure excitement. I arrived at Portmoak on Friday evening



and stayed overnight, much looking forward to beginning the weekend's flying. Saturday morning, after preparing the aircraft we were going to be using (the club's DG505) for flight, we started the course at 0900 with our first two hours of lectures. The lecture included a review of stall, spin and spiral dive theory, as well as a brief of the day's flying exercises. At 1100 we began our first flying session consisting of two sorties: the first ('Sortie A') consisted of a normal aerotow launch, including knowledge of signals and recovery from out of position, as well as various stall, spin and spiral dive scenarios where we needed to quickly recognise the symptoms of each one, and then apply the correct recovery. The second sortie ('Sortie B') required us to fly accurately a normal winch launch, followed by a circuit and landing. For our second flying session of the day, 'Sortie A' was flown in the club's Falke 2000 motor glider and included simulated aerotow rope breaks, recovery from being out of position on circuit as well as field landing practice. 'Sortie B' consisted of winch launch failures in the DG505. We put the aircraft away, had dinner, and then had our next three hours of lectures. This ran from 1800 until 2100, and included a debrief of the day's flying, analysis of controls in a turn, threat and error management, as well as take-off and landing (launch failures, circuit planning, approach control etc.). I went to bed that night exhausted, but absolutely exhilarated from the day's flying, and I couldn't wait to do it all again the next day.

Sunday we were back at it again. 2 hours in the briefing room, talking about the objective of air experience flights, flight planning and how to care for your pupil before beginning the day's flying session. Unfortunately we were unable to use the gliders as the sub-zero temperatures meant that despite our best efforts we were unable to de-ice the wings for long enough to conduct a safe flight. However we were able to complete 'Sortie A' - a

demonstration of how each of the control surfaces work as well as the importance of lookout, in the Falke. We completed the remainder of the lectures before reconvening the following Saturday to complete 'Sortie B' - a simulated air experience flight with Kate acting as our pupil. For my trial flight Kate pretended to be a little old lady who had been bought a flight in a glider as a birthday present from her daughter! As a 16 year old boy, thinking of and dealing with the needs and concerns that a granny may have while flying, was particularly challenging. I rose to the challenge and successfully completed the course as well as the acceptance checks, with CFI Mike Carruthers, two weeks later. I sent off for my rating and on the 5th of January 2018, it arrived, making me at 16 years and 6 months old, Scotland's youngest ever flight instructor.

Over the past 9 months I've flown over 30 air experience flights. The BI rating has given me the opportunity to meet and fly with a vast range of people, from 16 year old girls to 90 year old thrill seekers, from Greek IT workers to a Slovakian vet on holiday in Scotland. As their pilot I've had to calm and reassure them that everything is safe as I settle them into the aircraft (this sometimes takes a little extra effort due to my age and how young I look compared to the other instructors), then I explain how to get out of the aircraft and use their parachute in the event of an emergency. In flight I take their life into my hands as I talk them through the scenery and history of what we can see, and then demonstrate how our aircraft works before letting them fly it for themselves. These are all the technical aspects which have undoubtedly improved not only my flying skills but my interpersonal skills as well as helping me mature as an individual. However for me the best part of having the basic instructor rating is being able to share my love and passion for aviation with others, allowing them to take to the skies and catch the aviation

bug in the same way that I have, and then at the end of it all seeing them beaming with joy.

A personal highlight for me occurred just a few weeks ago when I was instructing at an air experience evening, and I was allocated to be the instructor for an airline pilot with Jet 2 who was thinking about taking up gliding and so had booked an air experience flight. As a 17 year-old aspiring to become a commercial airline pilot, to be PIC on a flight with a 737 captain was simply incredible.

Gaining my Basic Instructors rating has allowed me to take the coolest hobby in the world to the next level. The learning experience on the course was not only fascinating but exhilarating. Since gaining my rating I've had the privilege of introducing over 30 members of the public to the wonderful world of aviation. I believe that becoming Scotland's youngest ever flight instructor is also a key milestone in fulfilling my career aspiration of becoming a commercial airline pilot. However none of this would have been possible without the funding from the Honourable Company of Air Pilots, neither would it be possible without the Honourable Company and the British Gliding Association working together to provide this bursary. Therefore I would like to thank both organisations for awarding me the bursary, which has allowed me to have this truly awesome opportunity within the sport I love.

#### *Editor's Note:*

*The funding that Fred talks of here is sponsorship from both APT and AST (in the name of the Honourable Company) granted to the BGA to support their programme of training young gliding instructors. There is, or has been, a shortage of gliding instructors - and particularly younger instructors - so we agreed a few years ago to help fund a programme that the BGA has been running to encourage and train more individuals into instructing.*

# Company Visit to Biggin Hill

By Freeman Simon Costa. Photos by Graham Powell and the Editor.

On 27th September 2018, a beautiful, gin-clear day – perfect for those flying in – a group from the Honourable Company paid a visit to Biggin Hill. This was actually the second of two identical visits, the first having been a fortnight earlier. The Master, Colin Cox, and organiser, Graham Powell, headed a group of 14, more than half of whom arrived by air.

We were met by Andy Patsalides FRAeS, marketing manager of London Biggin Hill Airport, to give it its full name, who is irrepressible in his enthusiasm for showing off the airport and for aviation generally. After a welcome and security briefing, we began the tour.

First stop was a vast and pristine business jet hangar, Andy stressing that one of Biggin's unique selling propositions is the absence of any slot restrictions during its 0630-2300 operating hours, thereby "putting the customer in control" – unlike its main competitors, Luton and Farnborough. Biggin is currently seeing 39% annual growth in large business jet activity. Slightly incongruously, the same hangar housed a brand new Cirrus, rather smaller than its stable-mates, but specially painted to celebrate Cirrus producing its 7,000th aircraft; there's a Cirrus sales

office at the airport.

Our mini-bus then took us past some of the old, brick RAF buildings, which sit on a 30-acre parcel of Biggin's land owned by Bernie Ecclestone – together with hangars housing his own aircraft. Ecclestone's Falcon was outside being prepared for flight, and Andy cautioned, "No photos please, guys". He wasn't joking: Biggin attaches great importance to the privacy it can offer its business, VIP and Royal customers, who value the airport's proximity to London, its modest size, and the absence of scheduled flights. Discretion is the watchword.

The next stop was Shipping & Airlines Ltd, a delightful company owned by Liveryman Peter Greenyer. It occupies its own hangar, where it operates a light aircraft maintenance facility, and is a highly experienced maintainer and restorer of vintage aircraft. Peter's own collection of historic aircraft includes a beautiful red and silver DH Dragonfly built in 1937, a Rearwin Sportster (1936), a Curtis Wright Travelair (1931), a Miles Falcon M3A (1936), a DH Hornet Moth (1936) and a wartime Piper L4 Cub (1943) which saw service with the Free French in North Africa.

From slow, fixed-wing classics to fast,

rotary-wing luxury, as our journey next took us to Castle Air, which operates a fleet of AugustaWestland 109s. The AW109 is a six-passenger helicopter, with twin turbine speed and reliability. Castle Air's primary business is providing a shuttle service from Biggin to the London Heliport at Battersea, or the Vanguard Helipad near Canary Wharf. This can be a key element in Biggin's competitive offering: an executive can arrive from New York, land at Biggin as early as 0630, and then be in Battersea or Canary Wharf by 0700, since the AW109's flight time there is only six minutes.

Our next stop was probably the highlight for most of the group: the Heritage Hangar. This was established in 2011, to house the activities of The Spitfire Company (Biggin Hill) Ltd, originally to restore a single Spitfire. Now, it is the world's largest facility dedicated to the operation, maintenance and restoration of Spitfires – and with over a dozen Spits typically housed there, the Heritage Hangar also represents the world's largest single collection of airworthy Spitfires. Globally, there are around 50 flying Spits, meaning that more than 20% of these are based at Biggin Hill. It was fascinating to



*Andy explains the bizjet business model*



*Peter Greenyer's treasure trove*





*Hurricane AE977 painted to represent Pete Brothers' 32 Sqn example, as flown by him in the Battle of Britain*



*The high standard of engineering was everywhere at hand*



*The Envious Emil*

see various of these iconic aircraft being restored, with fuselages, wings and cockpits in various stages of rebuild, to say nothing of the awe-inspiring experience of being among so many airworthy examples – a full squadron's worth, in fact.

In addition to all the Spits – including, on the day of our visit, one of the Battle of Britain Memorial Flight's examples undergoing maintenance – the Heritage Hangar currently houses a 1940 Hawker Hurricane and a Battle of Britain veteran Messerschmitt 109e. This latter is said to be the only currently airworthy Emil in existence (the Airbus-owned one at Manching being grounded). What a treat!

The final visit of the day was to Oriens Aviation, a Pilatus dealer and authorized

service centre, owned by Freeman Edwin Brenninkmeyer. There we were introduced to the latest version of the Pilatus PC-12 single turboprop, and saw the impressive maintenance operation at work, which can also support certain Cessna Citation and Hawker-Beechcraft jets. Over 1,500 of the versatile PC-12 have been sold worldwide, either for executive transport, or for cargo, air ambulance, regional airline, government surveillance or special mission roles.

We were then hosted for lunch in the dining room of Signature Flight Support, the BBA-owned FBO at Biggin. Its sweeping views over the airport to the London skyline reinforced Biggin's proximity to London, and the sense in using Castle Air's helicopter shuttle rather than roads to get there. Much of Biggin

Hill's history is captured in a fine collection of black and white photographs hung on the room's walls.

During lunch, we were able to have a wide-ranging discussion with Andy about different aspects of Biggin's operation. He is rightly proud that the airport is home to over 65 commercial and aviation activities, including 11 maintenance organizations; that Signature has a facility at Biggin as well as at Heathrow and Gatwick; and that in the last 18 months, employment at the airport has grown from 1,002 to 1,307. In addition, Biggin Hill co-sponsors a flying scholarship, has launched an apprenticeship scheme in association with East Surrey College, and is partnering with London South East Colleges to develop a £12m Aerospace and Technology College at the airport.

But where does all this leave General Aviation? First, let's look at flying training. Many readers will have seen the recent letters pages in magazines such as Pilot and Flyer, where angry pilots claim that Biggin's management has cancelled its flying training operators' leases, and suspended flying training – in an effort to attract more business jets and turn Biggin Hill into Big Gin Hill. Will Curtis (MD of Biggin Hill) and Andy Palsalides respond that the issue is one of keeping business jets separated from other traffic so that their TCAS systems do not drive 'level busts', that NATS and the CAA asked Biggin to address this problem, and that the deadline for new flying training arrangements is not until March 31, 2019.

The counter-arguments, of course, are that business traffic invariably is under radar control (and comes down the ILS when landing, with light aircraft easily kept out of this flight path), appropriate transponder squawks can assist, and if business and light aircraft can co-exist at Stanstead, North Weald and Oxford, then why can't they at Biggin Hill? The All-



*An impounded bizjet*

Party Parliamentary Group on General Aviation has become involved, and statements from its Chair, Grant Shapps, imply that he doesn't agree with Biggin's stance. It seems that where things stand, pending a more comprehensive resolution, is that some flying training, such as rating renewals, might continue – but that circuit and solo work will have to be done elsewhere, with Redhill having been approached.

Second, what about Biggin Hill as a base for GA aircraft? Currently, Biggin is home to around 190 GA aircraft, and these can access the hangar and maintenance facilities, and can refuel from either a bowser service or a new self-fuelling facility. Biggin is a Port of Entry, and arguably provides the ability to get to Europe more easily than most other London airports – which are added benefits for GA pilots. Will Curtis has announced plans for a new, dedicated General Aviation Centre to be built at Biggin, which would manage all light aviation, including visitor movements, have modern facilities with a club feel, and direct road access; the self-fuelling facility would be relocated there. An Expression of Interest will be sent out shortly, as Biggin management wishes to devolve its operation and finances to a



*Canary Wharf within a (Giant's) leap – the view from the D2 hold*



*Part of Peter Greenyer's collection – Miles to bring Smiles*

third party. When the General Aviation Centre is built, it sounds as if it will be a valuable facility for GA; let's hope that more can be done to bring full flight training back to Biggin too. Until the GA Centre is running properly, and full flying training returns, encouraging 'air-mindedness' with merely an on-site Technology College and a flying scholarship looks simply disingenuous.

The group from the Honourable Company had an excellent visit, and our grateful thanks are due to Andy Patsalides for hosting us, and to Graham Powell for organizing the trip.



# Duxford's Battle of Britain Air Show

By the Editor, Photos by the Editor

The weekend of 22-23 September saw the Imperial War Museum's Cambridgeshire airfield and museum bring the flying element to the celebrations of the RAF's centenary to a stunning conclusion. In passing isn't it wonderful that the IWM, alone apart from Imperial College, clings in its name to a vestige of our past?

The weather was below average for what one might expect at that time of year, but it was good enough for the Editor to trundle over East Anglia at a relatively ungodly hour on the Saturday. Thanks to eminent Company members on the Flying Control Committee (PM Rick Peacock-Edwards and Past Editor Tom Eeles), I was able to attend the slightly delayed pilots' briefing. It was evident that flying-in had been a good option. From 4 mile finals one was overhead traffic queues, and poor Tom and others had been somewhat held up in traffic. This was a direct result of the event's popularity: the Saturday was a sell-out with a capacity 25,000 audience, and 51,000 attended over the whole weekend.

The management of the event was as thorough as one would expect from this experienced and distinguished team, including 7 fire trucks manned by 30 crew. It was evident that CAP 403

(specifically the latest, March 1918 edition) is the bible by which management and pilots are expected to live and breathe during their working day. In the post-Shoreham era, swept wing civil aeros are of course banned.

The Tiger contingent opened the proceedings with a magnificent formation of 16 aircraft (15 Tigers + 1 Moth Major) in stately procession from South to North, despite grey and blustery conditions. This was in a '100' design, in commemoration of the RAF's centenary. One of the highlights for me was the sound, let alone sight, of a Blenheim escorted by 6 Hurricanes. One of the latter was V7497 of Hawker Restorations giving its display debut. I also have a soft spot for Lysanders – their pilots on SOE missions were, in my opinion, amongst the most skilled, and daring, of all in WW2 (and the bar was high). A shame then that the commentator referred to its operation by the "Secret Operations Executive"! In a training aircraft sequence a Harvard took off after a Bulldog and Chipmunk – it was interesting to note that the noisy American machine seemed considerably less keen to leave the ground than its British brethren.

The Royal Norwegian Air Force's Historical Squadron brought two



Rod Dean and Red 3 pass a critical eye over the display

Vampires over, one of which was being flown by a charming Finnish F-16 jockey; they were very graceful. The BBMF's Lancaster was joined in flight by a 41 Sqn GR4 and a non-shiny new F35B in what was termed the Gibson Formation, in tribute to the leader of 617 Sqn. There were differing angles of attack!

The Reds had been based at Cambridge Airport for the weekend; their pilots came over for a greet-the- public session (and lunch, before returning there. Mike Ling / Red 3 (weeks later to receive an award at the T&A) is slightly more mature than your average Reds pilot, and his charming young daughter seemed particularly heart-broken when it was time for Daddy to go back to work! They roared in from the North, and the weather precluded a full display. But red white blue smoke soon merged with the damp Cambridgeshire sky in what was their last British display of their season.

The Duxford-based Sally B provide its usual burst of nostalgia for East Anglians, and then the sky was full of Spitfires – eighteen in all. A splendid end which must have left the large crowd well satisfied.

The bible

CAP 403 WEATHER LIMITS

| Type of aircraft  | Type of display                     | Weather minima                            |            |         |
|---|-------------------------------------|---|------------|---------|
| V/STOL aircraft, rotorcraft and other aircraft with a stalling speed below 50 knots | Flypasts                            | Cloud base broken (BKN) or overcast (OVC) | Visibility |         |
|   |                                     | 500 ft                                    | 1,500 m    |         |
|   | Full aerobatic displays             | Formations                                | 500 ft     | 3,000 m |
|   |                                     | Solo aircraft                             | 800 ft     | 3,000 m |
| Flying displays by other aircraft   | Flypasts or flat aerobatic displays | Formations                                | 800 ft     | 5 km    |
|   |                                     | Solo aircraft                             | 500 ft     | 5 km    |
|   | Full aerobatic displays             | Formations                                | 800 ft     | 5 km    |
|   |                                     | Solo aircraft                             | 1,000 ft   | 5 km    |
|   |                                     | Piston formations                         | 1,000 ft   | 5 km    |
|   |                                     | Jet / turboprop formations                | 1,500 ft   | 8 km    |

IWM

DUXFORD

BATTLE OF BRITAIN DISPLAY AND RAF 100TH ANNIVERSARY  
22 & 23 SEPTEMBER 2018

*2018 not 1940*



*Part of the 25,000 crowd*

*A lens full of Spits*



*Gladiator and Lysander*

*Reds*

*RAF trainers through the ages*







*Tutor taxiing in with a rather lame pyro effort in the background*



*Th(red)ing the needle*



*Majestic BBMF*



*The Spitfire finale*



*Sally B*

*PR Spitfire on finals*



*Reds*

# Company Academic Bursary Awards 2018

By Prof Marion Wooldridge, Chairman, Bursary Selection Panel

Following initial short listing and the recent interviews at City University, the following four students were each awarded a Company Academic Bursary; Judith Hallam, Timothy Clark Gibson, Matthew Boraman, and Nadeem Bandali. Judith and Matthew are both studying for the Air Safety Management (ASM) MSc, and Tim and Nadeem are taking the Air Transport Management (ATM) MSc course.

The diversity of backgrounds of our applicants this year was unusually wide with, as is usual now, pilots plus engineers

and cabin crew, and also this year included applicants with careers in air traffic control, and aero-medical examination and research. This made for a very interesting short-listing exercise, plus unusually wide ranging interview discussions. Unfortunately none of those selected for awards this year came from the MSc in Aircraft Maintenance Management, and we have not yet had any applicants from the newly approved MSc, Airport Management, which has only recently started accepting students.

Judith Hallam, originally from Surrey,

qualified as an Air Traffic Controller with NATS, and has since gone on to work in Germany, being based there since 2011 where she started off in an ATC Trainer capacity. Judith is now responsible for developing courses for trainee controllers, and liaison between the UK and the German course regulators. Her aim is to develop her management skills so that she is fully equipped to lead an ATC Training organisation in the future. Matthew Boraman is a Licensed Helicopter Engineer, who has worked in Norway and Nigeria, and is now based in Aberdeen. His career began with an



*Recent gliding scholarship winners*





apprenticeship at Premiair Aircraft, which was one of Europe's largest helicopter maintenance and charter organisations. Matthew's main aim in undertaking the ASM MSc is to gain a management role in helicopter air safety, and he is keen to understand more about the effects of culture on air safety.

Captain Tim Gibson is currently a type rating examiner on the Boeing 737-800 for Jet2, based at Stansted. He is also involved in pilot mentoring and pilot recruitment. Initially, his degree from Birmingham University led him to become an Associate of the Chartered Insurance Institute, but Tim soon changed his career path to become an RAF officer and Tornado GR-1

navigator. On leaving the RAF he undertook an integrated ATPL and has since been flying commercially, first as a corporate pilot and later as a captain for Ryanair, switching to Jet2 last year. Although wanting to undertake the ATM MSc for many years, it is only recently that personal circumstances have allowed him to begin. Nadeem Bandali is a Licensed Aircraft Engineer who initially trained in the UK, obtaining a degree in Aircraft Engineering before gaining some experience in Kenya. He now works for SR Technics UK Ltd on sub-contract to easyJet, at Gatwick Airport, where he also mentors trainee mechanics. Since January this year Nadeem is also a member of the RAeS Airworthiness and Maintenance

Speciality Group where he is involved in conference organisation relevant to his subject. His aim in undertaking the ATM MSc is to become a fully effective and confident manager and, through his outreach work, to also help stem the increasing shortage of licensed aircraft engineers.

As always, the selection panel greatly enjoyed talking with all the interviewees, and we are sure that all those awarded an Air Pilots Academic Bursary will be seen as excellent ambassadors for the aviation industry.



## Book Review

### *Spirit of the RAF - One Hundred Years of Excellence*

By Past Master Dr. Michael Fopp

Reviewed by the Editor

This volume is a history of the RAF set alongside reproductions of paintings of talismanic RAF aircraft or events. The former is authored by Dr. Michael Fopp, and is, as one might expect from a man with his impeccable historian's pedigree, authoritative. As a Yorkshireman, I was pleased to see that Michael acknowledges Sir George Cayley (the man who instructed his coachman to become Britain's first test pilot) as the father of flight! In my opinion, the description of some missions understandably verges on the bullish: the Peenemunde raid, for example, was far from precision bombing. And the narrative loops back on several occasions through the timeline of WW2. But with these small provisos, it is both enjoyable and informative.



As most British-based Company members will be aware, the art collection of the RAF Club is stupendous. The Art Committee, currently under the chairmanship of Wg Cdr Michael Gilbert, has assembled an unparalleled collection, which continues to evolve. This is the source for the majority of the illustrations in the book. However art is of course a matter of taste; the book is sponsored by BAe, and in consequence

Michael has selected some of their collection. Suffice to say that in my opinion there are one or two pictures that show that the skills of being able to capture both the essence of an aircraft, and portray human beings properly, are not bestowed on all.

It is a proper coffee table book – you would struggle to squeeze it into a briefcase. This reflects that the format is large enough to do the pictures justice, and there is a wealth of raw material from which to draw. The book would, in my view, make a perfect Christmas gift for most of us – albeit a little tricky to fit in one's Christmas stocking unless very ample of thigh!



*RLAT 2018 - BBMF in their Trenchard formation*