

FEBRUARY 2020 ISSUE 37



AIR PILOT



INSIDE...

FLYING SCHOLARSHIPS

AVIATION MUSEUMS IN THE UNITED STATES

VINTAGE AIRCRAFT FLYPAST

601 SQUADRON



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:

Malcolm G F White OBE

CLERK:

Paul J Tacon BA FCIS

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Air Pilots House, 52A Borough High Street,
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EMAIL: office@airpilots.org
www.airpilots.org

EDITOR:

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

EDITORIAL CONTRIBUTIONS:

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FUNCTION PHOTOGRAPHY:

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

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

DIARY



FEBRUARY 2020

12th	Archives lecture	Air Pilots' House (APH)
20th	GP&F	APH
24th	Pilot Aptitude Testing	RAFC Cranwell

MARCH 2020

11th	Instructors Working Group	APH
12th	GP&F	APH
	Court	Cutlers' Hall
16th	AGM	Merchant Taylors' Hall

APRIL 2020

2nd	Combined Courts Lunch	Cutlers' Hall
15th	ACEC	APH
16th	New Members' Briefing	APH
	GP&F	APH
	Assistants' Dinner	Cutlers' Hall
21st	APBF	APH
22nd	Lunch Club	RAF Club
	Cobham Lecture	RAF Club
29th	Archives Lecture	APH
30th	AST/APT	APH

VISITS PROGRAMME

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

Cover photo: Boeing B29 Doc at Oshkosh 2019,
courtesy of Assistant Richie Piper



A MESSAGE FROM YOUR EDITOR...

A new decade warrants a new look – and magazine design has moved on a touch over the last ten years. I hope you like it; thanks to Liveryman Ben Griffiths for his wise counsel on this design update.

This is the time of year when we start reporting on last year's scholarship winners (and it is coincidentally the deadline for applications for the 2020 awards). Editing these submissions reminded me that it is easy for we older pilots to become blasé about our job or passion. These youthful submissions have a uniform pattern, but they bring to life the emotions a trainee pilot endures and enjoys. One cannot also help noticing that the training course not only gives them a very valuable skill, that is flying an aircraft, but also, in most cases, it seems to make them a more mature human being. It is difficult to conclude other than that our scholarship programme is a very valuable social tool.

We look forward to seeing Australia giving up smoking. The images of swathes of the countryside in flames have tugged at heartstrings in Europe. I personally would be surprised if we do not hear, in due course, citations at the Trophies & Awards of tales of courage from the aircrew involved. Some of the images from flight decks of rescue and firefighting aircraft look like an aviation version of hell. We wish the crews involved (and indeed the firefighters on the ground) a successful and safe conclusion to their very challenging task.

Paul Smiddy - Editor



IN THIS ISSUE...

REGULARS

- 4 News Round Up & Gazette
- 7 Master's Message
- 11 Regional Report
- 14 From the Desk of the DAA
- 16 Gazette
- 33 Book Review



VISITS & EVENTS

- 21 Company visit to RAF Benson
- 42 The Vintage Aircraft Flypast of October 2019

FEATURES

- 17 601 (County of London) Squadron Royal Auxiliary Air Force
- 24 Selection for our Company Flying Scholarships - How it works
- 34 The Duke of Edinburgh's Award Scheme
- 36 Gliding with the Livery Schools Link

AROUND THE WORLD

- 38 Aviation Museums in the United States



NEWS ROUND UP

2019 WHICH? MAGAZINE SURVEY OF AIRLINES

This survey was published in December and **British Airways** found itself alongside repeat offenders, Ryanair and American Airlines, as one of the nation's worst airlines. It was criticised by respondents for the quality of its food and drink, the comfort of its seats, and value for money for its short-haul and long haul services, managing a 55% customer score overall.

6,535 holidaymakers were surveyed regarding their experiences of flights taken over the course of the previous year. BA was the third from the bottom of the short-haul table, and second from bottom in long-haul. Some passengers had such bad experiences they told Which? they would never fly British Airways again with one going as far as to say "BA is, without doubt, the worst airline we've ever used."

Ryanair was voted the worst short-haul airline, with a score of only 44%. Many passengers who had flown with the budget carrier pointed out the endless add-ons to fares and the finicky luggage requirements with one saying customers were treated like 'cash cows' and another carried on the analogy by saying the airline had a 'cattle class mentality'. Customers gave the airline the lowest possible score of one star out of a possible five in all categories including boarding, customer service and cabin experience, apart from value for money where it managed a two-star rating.

Vueling (54%) and **Wizz Air** (56%) were also among the worst of the short-haul carriers. Both failed to impress passengers in any of the categories with mostly two-star ratings for boarding, seat comfort and food and drink, although Wizz did manage three stars for value for money.

American Airlines meanwhile landed with a bump at the bottom on the long haul table with another miserable customer score of 48%. While the boarding process and the cabin cleanliness of the airline managed three stars, everything else was rated by passengers as below average. One passenger summed this up by saying: "the cabin was scruffy, the staff rude, the food awful."

Some airlines did prosper, however, and it wasn't just premium airlines that did well. Short-haul travellers continued to praise the efforts of Jet2 for its budget prices with premium service, giving the airline a 79 per cent customer score and five stars for customer service.

Passengers repeatedly used words like 'friendly' and 'efficient' over and over again, some said it was their favourite airline. One passenger told Which? "Jet2 doesn't feel like a low-cost airline."

EasyJet had a respectable 65% score. Travellers said it was 'fine', 'reliable' and 'no frills' and it got four stars for value for money.

There were clear winners when it came to the long-haul airline segment too. **Singapore Airlines** scored four or five stars for each category excelling in in-flight entertainment and customer service with a total 88% customer score. Many passengers spoke of the extra touches like Christmas carols when boarding, free bars of chocolate and others said they 'felt properly looked after'. While Singapore Airlines clearly offered one of the most pleasant in-flight experiences, **Emirates** also did well (76%) and in contrast, amended its no-show clause after pressure from Which? Travel. While still not perfect, according to Which?, the change means the airline will no longer cancel a return flight if they are notified within 24 hours of a missed outbound leg – something of which Singapore Airlines is still guilty.

Virgin Atlantic (72%) is also a consistent high scorer in the long-haul category and, unlike BA, has kept standards high whilst seeing off the budget upstarts like **Wow** and **Primera** (both now bust). Those surveyed also told Which? that it was the best option when flying to the US, and one went as far as to say "British Airways need to learn from Virgin".

Willie Walsh, CEO of BA owner IAG, who started his career as a cadet pilot at Aer Lingus, will retire on 30 June after 15 years with the company. In financial terms he has been a good steward of the company.

BOEING

In the June 2019 editorial I noted how the chairman of Boeing, Dennis Muilenberg, went against best standards of corporate governance (at least in the UK) in also holding the posts of President and CEO. In October Muilenberg testified before the US Congress. That did not go well. On December 23, Boeing announced that Muilenberg had 'resigned', with David Calhoun becoming President and CEO, and Lawrence Kellner becoming non-executive



chairman. Some division of duties at last.

On January 7th, the company announced it is now recommending sim training for 737 Max pilots before the type is returned to service (at the airlines' expense presumably). This is leading to a shortage of 737 Max sims. It has been reported that Muilenberg could receive departing compensation of \$39m. The families of the 346 passengers who died in the two 737 Max crashes have each been paid \$144,500 in compensation.

In January the company released to Congress a swathe of documents that underlined the entrenched cynical attitude at Boeing towards regulators and the certification process. Many employees, including the company's development pilots, did all they could to prevent sim training being mandatory for those converting to the Max. In a quote which will likely feature in histories of the aviation industry for decades to come, one pilot was quoted as saying *"This airplane is designed by clowns, who*

are in turn supervised by monkeys". The Chief Technical Pilot on the Max emailed in 2017: *"I want to stress the importance of holding firm that there will not be any type of simulator training required to transition from the NG to the MAX. Boeing will not allow that to happen. We'll go face to face with any regulator who tries to make that a requirement."*

Deep-seated cultural issues appear to be confirmed by another email exchange:

"Everyone has it in their head meeting schedule is the most important because that's what Leadership pressure and messages. All the messages are about meeting schedule, not delivering quality. We put ourselves in this position by picking the lowest cost supplier and signing up to impossible schedules. Why did the lowest ranking and most unproven supplier receive the contract? Solely because of bottom dollar."

Presumably the fall-out from this will have ramifications for the certification process of the 777X.

LIVERY COMPANIES IN SUSSEX

Past Master Dorothy Saul-Pooley and Liveryman Julia Thorp attended a special thanksgiving service for the Sussex Livery at Chichester Cathedral on 23rd November. It was organised by Daniel Hodson (Master of the Mercers' Company, 2008/9), to celebrate and acknowledge the good work and philanthropy of the livery companies in Sussex. The Very Reverend Stephen Waine (Dean of Chichester) commented *"The Cathedral is particularly grateful to have received funding towards the conservation of the Piper Tapestry behind the High Altar, and for the current project to restore and re-cover the Cathedral's roof"*. Livery Companies have also supported the South of England Show, Riding for the Disabled, Cricket Camp at Arundel Castle and Rustington Convalescent Home.

The lovely Evensong service was well attended with 61

Livery Companies represented, and around 150 people present.

NEW NATIONAL COACH FOR THE LAA PILOT COACHING SCHEME

Long-time LAA Coach and test pilot Chris Thompson has agreed to take over as National Coach for the LAA Pilot Coaching Scheme from Will Greenwood, who stands down at the end of 2019 after almost a decade of service. Chris will work alongside Head of Training Liveryman David Cockburn to help co-ordinate the work of the PCS Coaches and develop new initiatives for 2020. Chris has a wide range of flying experience in everything from the giant Antonov AN-2 biplane to the diminutive Cri-Cri and has also run the LAA's popular Air-Ground Radio Operators courses at his home airfield of Popham.



OLD WARDEN AND OLD LIVERYMAN

Liveryman Yvonne Trueman attended Old Warden's Classic Air Show last summer, and is still flying at the age of 84.

REMEMBRANCE 1 BA AT RUNNYMEDE

Liveryman Captain Steve Durrell was honoured in November to lay a wreath at the Runnymede Memorial commemorating the loss of BOAC aircrews in WW2.



REMEMBRANCE 2 BOMBER COMMAND MEMORIAL

Warden Legat together with Past Master Gault, and wives, laid a wreath for the Company.



MASTER'S MESSAGE

Malcolm G F White OBE

Given the events in Australia and Hong Kong our trip came at an interesting time. What has since unfolded in New South Wales and Victoria in Australia is awful and seems to be getting worse. So, to wish all our readers a Happy New Year feels inappropriate; but welcome to the new decade (or is it the end of the last) with the wish that events in Australia and Hong Kong improve, and improve quickly. For now, we wish you all good health, happiness and hopefully peace in 2020.

First and foremost, Vanessa and I want to thank everyone who so generously gave their time to help make our visit a success and yes, fun. To be on the receiving end of a Master's visit must be difficult and certainly time consuming. To all of you who were involved we offer a heartfelt thank you for sharing your local knowledge, arranging the meetings and visits, and of course for your hospitality, friendship, and your generous support.

I will try to combine this Master's Message with a report on our visit to the regions, which was carried out between the Trophies and Awards Banquet and our Annual Carol Service in London – so 45 days in all and completed within the budget. I once asked our Learned Clerk "Why do we do this?" Now I understand, as it was an outstanding opportunity for us to represent our Honourable Company, to meet many members, and better understand the challenges and issues they face as they represent us in each of our four international Regions – a reach which no other City Livery enjoys. And importantly, the opportunity for our Company to engage with senior leaders across the spectrum of the global aviation industry and community.

With the benefit of hindsight our visit had a certain context: from search and rescue in Canada and the high Arctic; the fires in Australia and the work of Conair; the role of the Royal Flying Doctor Service in Australia; the poignancy of the Mount Erebus 40th Anniversary in New Zealand; and the key contribution of the Government Air Service and the Observatory in Hong Kong. And just as a reminder after we returned to UK, the fatal eruption on White Island in New Zealand. All of these have a connection with what we do as Air Pilots.

In this report I reflect on some of the common themes:

- Communication with Air Pilots House and between the Regions;
- Education and Pilot Training;
- Young Membership;
- Transport Safety;
- and Unmanned Air Vehicles.

And as a non-commercial pilot, the opportunity to visit

Cathay City and see the complexity of a global aviation enterprise was illuminating. And importantly the visit enabled us to succeed the Trophies and Awards Banquet by presenting awards to those who were unable to attend in London. And one footnote – in addition to our connecting flights around the world we were able to fly with Harbour Air in Canada; myself in an RV7 from Aldinga airfield in Australia, and both of us with the Government Air Service in Hong Kong. What a privilege.

Vanessa had not been South of the equator before, and neither of us had been to Australia and New Zealand; so, this was an education and a treat. We travelled as a team and V participated in nearly every event albeit, and to her regret, there was little time for shopping. Her knowledge of our Company, the RAF, its Museum and the heritage sector was a real bonus. Six degrees of separation also played a part. Everywhere we went, we either knew someone directly or we had a shared connection. This really helped and to this I must add the key support in the UK from Colin and Den Cox, John and Linda Towell, and John Turner for his excellent briefs ahead of the visit, and of course the support from Air Pilots House.

Our detailed itinerary and meeting schedule will be on file in head office and will inform the after-visit report to the General Purposes and Finance Committee.

COMMUNICATION WITH LONDON AND BETWEEN THE REGIONS

From day one it was clear that the Regions welcome the annual visit by the Master. Equally, the 12-month gap between visits leaves space for more to do. Our Clerk sustains that relationship, but the idea of a Regional Conference Call (RCC) with and between Regions was mooted. This has been agreed and the first call has been set for 5 February. Given the time zone challenge, London will host the first RCC and do 'the night shift'. We will see how it goes and then consider the value and next steps.

THE AIR PILOTS' RELEVANCE AND MEMBERSHIP

Beyond our membership the notion of a City Livery Company is not always understood on the international stage. Indeed, one of our hosts suggested it was a form of Masonic Lodge. We gave clarity. But perhaps we do need to convey our vision and mission, purpose and values more clearly? Especially if we are to attract new members. Not least as some in the USA do not understand what we offer, and why.

YOUNG MEMBERS

Australia and Hong Kong are ahead of the game, but in step with what we seek to achieve in the UK. The notion of "classroom to cockpit", scholarships, pilot training and academies, are alive and well and the cost of training is significantly less than it is in the UK.

TRANSPORT SAFETY

Safety is obviously core to what we do. Be it aircrew and operator fatigue, mental health, post-accident investigation and put simply – accident prevention. The interesting point to me is that in the regions air safety does not stand alone, rather it embraces other forms of transport to include road, rail and sea. When I asked why, the response was clear: the human element transcends the environment and there are lessons to be learned and shared. A good point.

UNMANNED AIR VEHICLES

The challenge of the future of unmanned air vehicles varies from region to region in part due to the airspace structure - the vast free space in the likes of central Australia set against the congested airspace around regional hubs and, for example, Hong Kong. During our trip we saw small to medium sized drones over the Remembrance Day Service in Canberra, and in the congested airspace around Hong Kong. To me, the regulatory authorities seem more relaxed than they are in the UK, but then airspace congestion in controlled airspace in southern UK is a rather different matter from that over Alice Springs.

The North American Region

WASHINGTON DC

Our visit started with the challenge of clearing immigration at Dulles Airport and then navigating the traffic following the Washington Marathon. Three highlights:

First, a visit to the Udvar Hazy Museum in Virginia where my wife was firmly in her comfort zone.

Second, a meeting and briefing with Airbus America. Their office (and laboratory) in Pennsylvania Avenue is impressive. So too their appreciation of the juxtaposition between technology and pilot flying skills. We were asked if next year the Master might visit their facility in Mobile. I will leave John Towell to decide.

Finally, a meeting with the Air Line Pilots Association (ALPA), which represents over 65,000 pilots. It was a great visit which we must follow up, as they would like to work together with us in the future as potentially this could boost our membership in the United States.

Canada

Our visit started with a day in Montréal, then on to Ottawa and finally Vancouver. Bizarrely one of our travel

highlights was our train journey between Montreal and Ottawa: luggage checked in and to our relief it was there on arrival. Try that in UK.

Our time in Montreal was spent in the delightful company of Charlie Simpson. We had a good meeting with Dr Fan Liu, the Secretary General of the International Civil Aviation Organisation (ICAO). In Ottawa we attended a dinner in the Rideau Club to present the Master's North American Trophy to Cougar Helicopters, and what a story that is. And the next day met with General Al Meinzing, the Commander of the Royal Canadian Air Force.

Having arrived in Vancouver we attended the North American Region's AGM in the Harbour Air Offices. This was followed by dinner in the Flying Beaver Restaurant. The next day a visit to Abbotsford Airport, hosted by Jeff Oliver at the Conair facility. Here we saw two Conair RJ (BAE 146) aircraft in preparation for delivery to Australia.



The Australian Region

Our time in Australia was a delight. At the beginning the bush fires seemed somewhat remote, but from crystal clear skies one day to the smell of smoke and poor visibility the next, the experience was surreal. Yet the reality reinforced as we flew between the cities in south eastern Australia. As Prince Charles has observed, this remains an appalling horror.

Rob Dicker has provided a Regional Report which follows in this Edition. So, I won't repeat too much save to say that his commitment during our visit was exceptional. There were many highlights from this visit in what is a huge geographic region. I comment on a few. On arrival we were fortunate to stay with Sandy & Marj Howard; we had time to visit the beautiful beach at Manley (it helped to decompress after 15 hours in the air) and then participate in the sweepstake for the Melbourne Cup, a horse race which seems to bring Australia to a standstill. We also stayed with Peter Norford (former Air Attaché to London) and his wife Jane, and met with other friends and colleagues from the past to include a former Australian Navy pilot, John Seibert, and his wife Anna who persuaded V to take up the ukulele, which Father Christmas duly

delivered on our return.

Held on Monday 11 November in bright sunshine and in the grounds below the Australian War Memorial, this was different from marching past the Cenotaph in Whitehall on a cold winter's day. Sun cream was required. We had been told that this was a "must do" and our time spent in the museum and at the Sunset Ceremony that evening was special. The way in which the Memorial (and Museum) tells the story of those who have served their country and continue to serve, is compelling.

The Flying Doctor is an iconic brand and our time spent with the RFDS was a reminder of what they do, the risks they manage, the excellence of their staff and training. If clarity of their mission was required, we witnessed the return of a mother who gave birth shortly after landing at Brisbane Airport. Generally a single pilot operation with medical support on board, this service covers a huge area and some often challenging and remote landing strips; this is raw flying at its best.

The New Zealand Region

Despite the clear blue skies our visit to New Zealand started with the most turbulent approach we have experienced. My knuckles are still bruised from V's grip. We then flew to Auckland to attend the 40th Anniversary Memorial Service at the Holy Trinity Cathedral to remember the 257 passengers and crew who lost their lives when Flight TE 901 crashed on Mount Erebus in

Antarctica. Dame Patsy Reddy, the Governor-General of New Zealand attended and gave a moving speech. Reverend Doctor Richard Waugh – Chaplain of the Honourable Company of Air Pilots (New Zealand Region) and I participated; and over 300 relatives and friends attended. Two days later and on 28 November (the actual anniversary) the Chairman of Air New Zealand and the Prime Minister offered a full apology. For those who lost their loved ones this was a significant moment and one when they could perhaps start to move on, and see a memorial built.

WELLINGTON

Our next stop on the planned itinerary was to attend meetings with Aviation New Zealand (AIA), the Transport Accident Investigation Commission (TAIC) and the Civil Aviation Authority of New Zealand. Between them they represent the interests of the total aviation community. If there was one concern, it was the continued incidence of helicopter accidents, but having seen the geography and flying conditions on South Island, one can understand the challenge.

AUCKLAND

The Regional Dinner was held in St Matthew-in-the-City. A moving evening given the Erebus Anniversary and the presence of the Roll of Honour in the church for those who lost their lives on TE 901. Finally, a visit to the Royal



The NZ Dinner

New Zealand Air Force (RNZAF) Auckland Air Base, which is one of three bases which together support a force of some 2500 servicemen and women. But in addition to their out of area operations, the area which they cover is massive. We were given a tour of their C-130H Hercules and Boeing 757 and listened to the return of a P-3K2 Orion!

The Hong Kong Region



Those in commercial aviation will know this place well. But it was an experience for us. Having landed we were whisked off to join the end of a one-day seminar established by the Hong Kong Team. A great initiative which chimes with what we seek to do in the UK. Thankfully, the local elections in November had brought a certain calm and the only physical signs of the recent demonstrations were the missing pavement stones and the ready-mixed concrete put in place to repair the damage. Our visit went ahead as planned, and we were hosted by Assistant Pat Voight and Nicci.



THE HONG KONG GOVERNMENT FLYING SERVICE (GFS)

What an impressive operation. We flew from the Wanchai Helipad, but only after I had been caught in a broken lift for an hour until the fire service was able to prize open the lift doors! On arrival at HKIA we were met by the Controller and his team and, in the mix, we met a former RAF helicopter pilot from Malcolm's time in RAF Germany. Again, a small world.

The GFS covers a breadth of missions to include Aerial Survey, Air Ambulance, Firefighting, Government Support, Internal Security and importantly Search & Rescue (for which the service received our Prince Phillip Helicopter Rescue Award in 2006/7 and 2018).

THE HONG KONG OBSERVATORY

I did wonder why we were going, but the visit was fascinating. Met by the controller I now understand the typhoon warning system from I to IO. Located in an historic building built in 1883, today the Observatory is the home of a cutting-edge forecasting centre.

In addition to the obvious, it monitors radiation levels in the region and delivers a bespoke service to Hong Kong International Airport (HKIA) which monitors the wind shear caused by the infrastructure at HKIA. Their working brand is Science.

HONG KONG INTERNATIONAL AIRPORT (HKIA) AND CATHAY PACIFIC

The day started with a visit to the Air Accident Investigation Authority (AAIA) based at HKIA, moved on to a tour of Cathay City which included lunch hosted by Peter Clemmow, followed by a flight in the B 747 400 – 8 simulator which Vanessa landed beautifully with a little help from her First Officer – Assistant Pat Voight.

But it was the enormity and complexity of the Cathay operation which really impressed. From the flying programme, the global tracking of aircraft, to a fascinating computer-based solution which "captures incidents" and is then used for open and honest reviews of what happened. A great tool.

THE REGIONAL DINNER

It was strange to have Brussels sprouts in what felt like summer, but this was a lovely festive evening to round off our visit.

Finally, by the time we were back in London our visit had been reported in the Cathay Newsletter. Since then some 10 applications to join the Air Pilots have been received.

REFLECTIONS AND THOUGHTS

Personally, the value of our visits to the Regions was immense and there are several topics which I will follow up with the Clerk and the GP&F. But for close to six weeks V and I were immersed in Air Pilot's business. The briefings, meetings and visits were excellent and a real education – "never too late to learn" comes to mind. But perhaps the real bonus was to talk with like-minded colleagues and friends on what the Honourable Company does now, and what it can do in the future.

We must and will respect and promote the traditions of the Livery, but I feel we also need to change gear and work together to better represent our global industry building on the commitment and support of our wider membership.

REGIONAL REPORT

Australasian Region

By the Chairman, Robert Dicker

The highlight of the last few months has undoubtedly been the visit of the Master and Mistress, with functions to enable members to get together in all the south eastern capital cities. But there have also been other events where the Honourable Company has been well represented over the last few months...

In September the Pacific and Australasian CRM Developers' and Facilitators' Forum (PACDEFF) was convened on the Gold Coast with the Honourable Company represented by Wayne Martin, the Forum Coordinator, IPC, Mike Cleaver and members Pat Murray, Peter Antonenko, Peter Raven and young member Nick Arman. There was a full three day program of keynote speakers, forums and workshops.

October saw the biennial Safeskies 2019 Conference in Canberra, beginning with the Sir Reginald Ansett Memorial Dinner and Lecture, held in the Great Hall of Parliament House and which was presented, this year, by Dr. Fang Liu, Secretary General of ICAO. There followed another two days of high quality presentations and discussion that fulfilled the conference aims of being a promoter and educator of aviation safety.

The Honourable Company can be justly proud that we are well represented on the board of Safeskies, including Safeskies Patron, Peter Lloyd, and Chairman, Peter Raven, as well as being one of the largest non-government organisations in attendance at the conference with at least half a dozen members either presenting or chairing panels and probably an equal number as delegates of various organisations.

This year marks the Centenary of the epic flight of pilots Sir Ross and Sir Keith Smith, accompanied by mechanics Jim Bennett and Wally Shiers, from London to Darwin in under 30 days and then across Australia to finish in Adelaide. Ross and Keith Smith were from South Australia so it is fitting that a number of our South Australian members were closely involved with organising a fly past over Adelaide to commemorate this historic event. You can read more about the flypast elsewhere in the magazine.

The Master and Vanessa arrived in Sydney in early November to start the Australian leg of their tour of the regions. In his address the Master was keen to promote better communication and engagement with the Regions, via modern communication methods, to harness the global nature and resources of the Company's membership. He is

also keen to get better value from the Company's scholarships by providing them in other countries with better weather and more affordable rates. I couldn't help but note that the UK was able to raise £185,000 through fund raising last year to support their scholarships, which made me think about how we could do even a little better here in Australia.

Additionally we have been responding to various CASA consultations and attending meetings, such as RAPAC. In this regard I would like to mention one member, Doug Stott. He has been a member of the Honourable Company for more than 25 years, was Chairman of the QWG for several years, and a RAPAC representative for many years. Doug has been gradually stepping back from these roles over the last couple of years and finally relinquishing his role as a RAPAC representative in 2019. I would like to thank him Doug for his long service.

After the summer break the next big item on our agenda will be the AGM, which will be held in Sydney on Wednesday 11 March. For the members who are remote from Sydney we will be attempting to make the meeting more inclusive by making it accessible via "Zoom" video conferencing.

THE MASTER'S TOUR OF AUSTRALASIA

Despite some communication difficulties over the preceding months the Master and Vanessa arrived in Sydney from Vancouver on schedule in early November to begin the Australian leg of their tour of the regions. Looking a little jet lagged after their 15 hour flight we transported them to their accommodation and hosts for the next couple days, Sandy and Marj Howard, in the northern suburbs of Sydney

The following day Sydney put on a picture perfect display with clear blue skies, the white sails of the Opera House gleaming in the sunshine and the imposing structure of the harbour bridge as a backdrop. Twenty or so Honourable Company members turned out for a cruise on the harbour over lunch and a chance to chat with their guests. This included a couple of nonagenarian members, Past Master Frank Dell (1988), and former Chairman of the Australian Region, Peter Lloyd, both of whom are older than the Company itself.

The first leg of the tour complete, the following day just



involved a repositioning to Brisbane where our guests were met by Queensland Working Group Chairman, Tony Alder and taken to lunch, although not before a little incident involving someone's passport.

One of Malcolm's friends from their 1971 pilot's course, Chris Daymon, who now lives in Brisbane, hosted them for the next couple of days. The following day was a scorcher in Brisbane with a top temperature of 37°C so, abandoning ties in pursuit of comfort, the party set off to visit an Australian icon, the Queensland section of the RFS which is headquartered at Brisbane Airport. This was followed by a visit to Aviation High, part of the Queensland Government's Aerospace Gateway to Industry Schools Program.

That evening and the following day were spent with their hosts until the evening's formal dinner, held at the Queensland Club. The four award recipients that were to be presented that evening gathered with the Master and Chairmen in the Green Room prior to the start of the formal proceedings for introductions and a short brief on the format for the evening. Presentations that evening included:

- The Grand Master's Australian Award, received by Wg Cdr Daniel Rich on behalf of the RAAF Aircraft Research and Development Unit
- The Australian Bi-Centennial Award to Nathan Higgins of Advanced Flight Theory
- The Captain John Ashton Memorial Award to Captain David Evans and
- A Master Air Pilot Certificate to Captain Ed Field.



Pre-dinner drinks and lively conversation amongst the fifty or so assembled guests ensued prior to the beginning of formalities of the evening which was overseen by MC, Captain John Howie and QWG Chairman, Captain Tony Alder. After presentation of the awards the Master addressed the members and guests with the opening line, "I'm not Colin Cox ...". More on the themes of the Master's address later on.

Needless to say a good evening was had by all but, as is often the case with these events, it felt like there was not nearly enough time to catch up with everyone that one would wish to. Sunday was just a travelling day; Brisbane to Canberra, where Pete and Jane Norford hosted the Master and Vanessa for the next few days. Pete knew Vanessa from

his days as Air Attaché at the Australian High Commission in London from 2008 – 2010, when she was able to help him with his many queries of the RAF Museum.

It is possible there was quite a bit of red wine flowing that evening as, unfortunately, Malcolm fell up a short flight of stairs on the Norfords' back patio suffering some "gravel rash" to his forehead and a slight cut to his nose. Not great for all the obligatory photos that the Master has to appear in but it's amazing what you can do with Photoshop these days!

Monday was a beautiful clear day in Canberra, an ideal backdrop to the Remembrance Day ceremonies held in front of the Australian War Memorial, and attended by the Governor General of Australia, His Excellency General the Hon David Hurley, the Chief of the Defence Force, and the three heads of the Defence Force Services. After the ceremony our guests spent the next few hours exploring the many exhibits within the War Memorial, culminating in the Last Post Ceremony which is held each evening, just before closing time and shares the story behind one of the names on the Roll of Honour.

Tuesday was a relaxed day, allowing some sight-seeing around Canberra. Lunch was at the National Arboretum where Australian Region Chairman, Rob Dicker, met with the party and was able to discuss with the Master some topics of mutual interest before dispersing to catch up on some individual duties.

Due to some rather strong winds the planned informal get together of local members with the Master at the Canberra Yacht Club (by the lake) had to be moved to a more sheltered venue at the Norford's residence. About a dozen local, and not so local, members got together over catered food and wine in a relaxed atmosphere to discuss matters of import; many reminiscences, long and short, were relayed.

Wednesday was a busy day with calls scheduled with the Acting Chief of Air Force, Air Vice-Marshal Stephen Meredith, AM, DSM; Acting Executive Director, Aviation & Airports, Department of Infrastructure and Regional Development, Jim Wolfe; CEO and Director of Air Safety, Civil Aviation Safety Authority, Shane Carmody; and the CEO and Chief Commissioner of the Australian Transport Safety Bureau, Greg Hood.

All made the Master welcome and discussed topics of mutual interest (e.g. aviation safety, drones) as well as other topics not quite related to aviation (e.g. Brexit).

After a rendezvous with Vanessa, who had spent the morning at the National Museum of Australia, it was off to the airport again for the flight across to Adelaide where Malcolm's long-time friend from US exchange days, John Seibert, and his wife Anna, were to host them.

Thursday saw about a dozen or so SA members, including M and V exploring some of the vineyards to the south east of Adelaide, around Kuitpo and McLaren Vale. According to Rob Moore, SAWG Chairman, one of the best winery visits he has ever had!

The following day the Master, accompanied by Rob Moore and John Seibert, visited Flight Training Adelaide (FTA) at Parafield Airport where they were hosted by Business Development Manager, Michael Wallis. A tour of the facilities was followed by lunch in the Cadets' Mess before adjourning to prepare for the evening's formal dinner.

More than 60 members and guests assembled at Adelaide's Naval, Military and Air Force Club for the SAWG Annual Dinner. Before the Master gave his address, certificates were presented to scholarship recipients Maihka Ly and Jamie Zammit, a Master Air Pilot Certificate to Ron Biddell, AFC, and the Master's Trophy for the Australian Region to Captain Darryl Hill for his pivotal role in organising a fly past and poppy drop at the 2018 Centennial Remembrance Day Ceremony. Once the final toast to the Honourable Company had been given many retired, perhaps to be well rested for the next day at Aldinga, while a few retired to the bar for a night cap, perhaps to fortify themselves for the next day.

Saturday dawned with light high cloud cover and a light south westerly wind as a crowd of thirty or so assembled at Aldinga airfield, about an hour's drive south of Adelaide, for the Annual Spot Landing Competition and BBQ lunch. The competition has become an institution and a rite of passage for Masters of the Honourable Company. The trophy has a number of notable Past Masters as winners of the competition but unfortunately it was not to be Malcolm's day this year. The competition was tied but the adjudicator's decision was to award the prize to the younger competitor, Vlad Zhelezarov. However, the flying did leave a smile on the Master's face, which only got broader when Steve Nelson took him for a flight in his RV7, including some aerobatics.

Sunday was just a positioning flight to Melbourne, and Monday a requested day off for our guests. Tuesday was the last official event of the Australian leg of the tour with a visit to the RAAF Museum at Point Cook, south west of Melbourne. About a dozen members joined the Master for a guided tour around the museum by Museum Director, Dave Gardner.

Point Cook is the birthplace of the Australian Flying Corps (AFC), which was renamed to the Royal Australian Air Force following its success in World War I. RAAF Base Point Cook was the Air Force's only base from 1912 to 1925, when RAAF Base Richmond and RAAF Base Laverton were built. The museum houses an extensive collection of memorabilia and stories of Australia's military aviation expeditions.

The tour ended with a flying display by a Tiger Moth and Sopwith Pup with a guest appearance by the museum's newly airworthy P51 Mustang, following which the group adjourned to the nearby Sanctuary Lakes Resort for a late lunch.

And so the Master's tour of Australia came to an end, good byes were said. As Australian Region Chairman and in the position for only a few months, I took the opportunity of the Master's Tour to also attend all the major events in

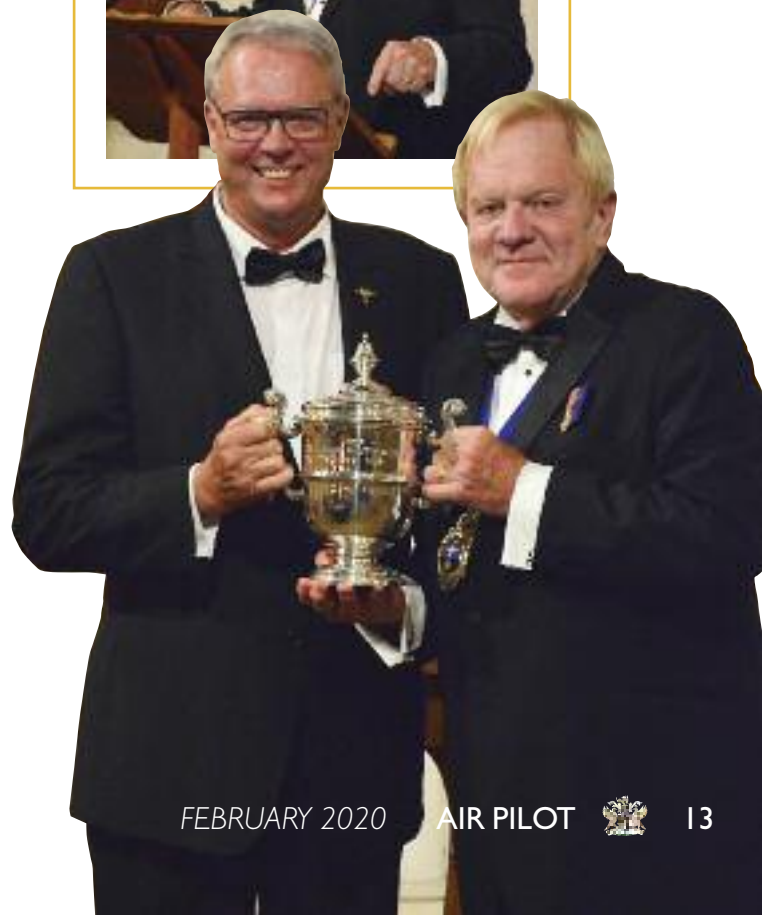
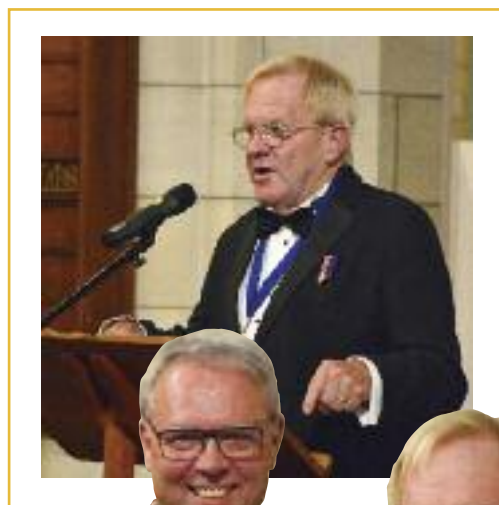
the various cities on his itinerary. It probably felt to Malcolm & Vanessa as though I was checking up on them but my real intention was the same as theirs - to meet as many members in the region as possible as well as some official duties for which I was required.

This certainly gave me an insight into the demands of such a tour. Even though this was their first visit to Australia, and we certainly tried to show them a bit of this country, it is by no means a holiday for the Master and Mistress. In this regard the whole tour was made more enjoyable by their easy going nature and good humour.

THE MASTER'S TOUR IN NZ

The Annual Dinner of the New Zealand Region was held at St Matthew-in-the-City, Auckland, on 28 November - timed to commemorate the 40th anniversary of the loss of Air New Zealand's flight TE901, the DC-10 which crashed on Mt Erebus, Antarctica, with the loss of all 257 on board.

During the dinner the Master presented the Jean Batten Award Trophy to Warren Denholm for his and Avspecs' part in the restoration to flying status of three DH98 Mosquitos. Sadly, Glyn Powell QSM, the joint recipient of the trophy, died two days earlier.



FROM THE DESK OF THE DIRECTOR AVIATION AFFAIRS

Liveryman John Turner

Although it is a little belated by the time the magazine is printed, please accept my best wishes for a Safe and Happy New Year and welcome to the new decade of the 'Twenty Twenties.'

THE NEXT DECADE?

We will undoubtedly continue to hear the increasingly strident calls for more political focus on the environment and climate-change countermeasures, so it is easy to predict that development and innovation of fossil-fuel alternatives will continue into the 'Twenty Twenties'. It also seems inevitable that as the rate of change in all aspects of manned and unmanned aviation continues to accelerate, some fundamentals will remain unchanged. In the first issue of the previous decade, this magazine's predecessor, *Guild News*, reported on a visit to the Officer and Aircrew Selection Centre at Royal Air Force College Cranwell. So it is fitting in this issue to return to the importance of robust pilot selection in achieving high calibre air pilots capable of dealing with today's challenges.

ELECTRIC-POWER AIR VEHICLES?

In the unmanned (or optionally manned) sphere, many organisations - including the established conventional aircraft manufacturers - are working on electric-powered vertical take-off and landing Urban Air Transport craft. Architects' designs for 'Verti-ports' already exist and Uber expects to start operating four-seater vehicles designed by Joby Aviation of California by 2023. Electric-powered aircraft are also set to make significant advances in other fields. The number of general aviation electric aircraft designs and flying prototypes continues to grow, with electric-air racing established as a new sport and medium-size electric- or hybrid-engine twins¹ on the horizon.

However, there appears to be a physical barrier to further expansion of electric power because the energy density needed for a long-haul flight is much greater than current and near-future battery systems can sensibly fit within large airliner weight and volume constraints. Further increases in battery energy density, even if possible, may not be the best way forward; we have already seen what happened when Lithium batteries were first introduced. Some experts suggest that fuel cell technology, rather than batteries, will provide the solution to longer-range 'clean' air transport; they may also be a better solution in the automotive markets too. By the end of this decade we might even have international design and build standards for aviation and automotive fuel cells established!

SINGLE-PILOT AIRLINERS?

I'm sure all Air Pilots will welcome the opportunity to reduce aviation's environmental footprint. However, we will be less ready to accept single-pilot airliners, which increasingly gain media attention² in the margins of reporting on 'pilotless' urban air transports (and 'driverless' cars). Nonetheless, an Aerospace Technology Institute (ATI) paper³ of July 2019 notes that most major aircraft manufacturers and avionics systems suppliers are developing the technology to support their introduction. Luiz Sergio Chiessi, Embraer Vice-President for airline market intelligence, has stated that they are looking to provide single pilot capability by 2020-25⁴.

The ATI paper describes how over time flight deck numbers have reduced from four (two pilots, flight engineer and navigator/radio operator) in a 1952 Comet, to three (two pilots and a flight engineer) in a 1983 Boeing 747-300, to just two pilots in a 2015 Airbus 350. It identifies that, **"the three main human issues that need to be addressed for single pilot operations are: workload, system and flight management; tactical and strategic flight planning; and the avoidance of error."** Reading this, I was immediately reminded of the skilled operator error factors⁵ assumed in aircraft (and atomic power station) technical failure analyses. Can aircraft technical design really become ten times safer to compensate for the loss of the monitoring pilot? The paper concludes with these statements:

- "The key drivers for further reductions of flight deck crew in commercial operations will likely come from sources other than technology (costs, demographics, demand and crew availability).
- The move towards more-automated or autonomous cockpits will be an opportunity to further increase aviation safety and support new developments in key areas of cockpit technologies.
- The effort required to enable this must not be underestimated and the temptation to consider in any way the possibility of replacing further crew without a full redesign of the cockpit flight control systems should be avoided."

The first statement should not be a surprise but the second is highly contentious, especially in a year when aircraft automatics led to the grounding of a whole fleet of new airliners. Boeing 737-Max aside, the comment reflects the poor understanding of the many occasions when pilots keep passengers (and the over-flown public) safe by handling often technical failures in complex aircraft that the designers had not even considered possible.

The second statement also speaks volumes on the continued erosion of the status of airline pilots in the minds of those outside aviation, who have been led to believe our function is no more difficult than watching an automatic machine and will often say "after all, the autopilot does all the work..." (We should never miss an opportunity to explain that it is mistake-prone humans that design the automation in the first place, and pilots and not the autopilot who take over when the automation fails.)

The third comment makes it clear that further development of the cockpit human-machine interface is necessary. Perhaps continuing to improve the design of current cockpits while also keeping two pilots on the flight deck might better achieve the safety utopia envisaged through increased automation?

Of course, this issue goes beyond economics and technology. To quote John Hansman, professor of aeronautics at the Massachusetts Institute of Technology, *"The issue has never been 'could you automate an airplane and fly it autonomously?' The issue is 'could you put paying customers in the back?'"* Recent research shows that while 52% would be wary of flying in a single-pilot airliner, younger passengers are more accepting of the technology; will their heightened awareness of environmental issues reverse the current demand for increasing air travel (and ever-lower air ticket prices)?

Finally, Thomas Edwards, Director of Aeronautics at NASA Ames Research Center, has already asked,⁶ *"is one pilot a logical stepping stone on the way to zero pilots?"* Personally, I only board airliners on the basis that if the pilot thinks it is safe to be in the aircraft, then so do I. On the other hand, I once vowed never to fly as a passenger across the Atlantic in an airliner with less than four engines. Now I normally make the trip in aircraft with only two and positively seek out Boeing 787 and Airbus 350 flights to benefit from their lower cruise cabin altitude! How quickly we adapt! Will we be discussing pilotless airliner safety before the start of the 'twenty thirties'?

AVIATION SKILLS SHORTAGE - INTERESTED IN AVIATION?

Convincing young people to engage with and take up careers in aviation will be one way to relieve the growing pressure for single-pilot airliner designs. My earlier requests for information that will help us identify how to

interest more people in a career in aviation has now generated 11 responses from our 2,000 members. Fortunately, there is still time to add to the data by relating your personal experience. Please find time to note down what sparked your decision to follow a career/become involved in aviation, whether that was following a family tradition, some seminal moment, an idea that developed over time or just a matter of economics. (Last month I discovered someone⁷ who joined Airbus at Toulouse because they were desperate to leave a boring job with an engineering company in the UK!) Please send emails to daa@airpilots.org using the title INTERESTED IN AVIATION or write to me at the office address, Air Pilots House, 52A Borough High Street, London, SE1 1XN, UK. Unless you indicate otherwise, you will not be identifiable when I cover the results later this year.

IDENTIFYING THOSE WITH THE SKILLS TO MEET THE AVIATION SKILLS SHORTAGE

The standard an individual achieves at graduation from flight training will depend, in part, on their natural attributes and aptitude to assimilate that training, as will their future performance. The need to avoid the costs of expensive training for those unlikely to pass provides the incentive for many of today's selection processes in the military and some airlines. The processes themselves are often much more effective than those I experienced, examining not only personal qualities, prowess in mathematics, mechanical and electrical reasoning, hand-eye coordination and spatial awareness but also a candidate's physiological and psychological pre-disposition to meet the challenges of flight training successfully. Some airlines also apply additional selection tests before employing new aircrew, including prolonged and demanding simulator assessments.

For a relatively small fee of £155, the Air Pilots provide aptitude assessment in the UK for potential ab-initio pilots.⁸ We believe this is an important facility for those contemplating a career as a commercial pilot because acceptance into some flight training schools around the world appears to be based entirely on the ability of a candidate (or more often their parents) to pay. The acceptance of students based on anything other than their aptitude for flying is not conducive to producing confident and capable pilots that will be able to cope safely with the various complexities of machine and global environment they will face throughout their career. Yet there is no global application of, nor even minimum standard for, the pre-selection of people entering training courses that lead to professional commercial pilot qualifications. We see this as a shortcoming in national and international safety programmes. Accordingly, at the start of this new decade we will urge the UK Civil Aviation Authority and, hopefully through them, the International Civil Aviation Organisation (ICAO) to recommend global pre-selection requirements for those planning to enter the world of professional aviation.

We recognise the tension between establishing new barriers to entry and encouraging more people to seek a career as a professional pilot, but the need to maintain and improve standards is never greater than when demand outstrips supply. Also, training school efficiency should improve with improving student quality, so not only will the

qualified pilot supply pipeline become more efficient, the standard of flying and quality of recurrent training within the international airline fleets will also improve.

Regardless of the number of people on the flight deck, those that are there must be of the highest quality and capability.

1 <https://www.thetimes.co.uk/article/electric-powered-passenger-aircraft-to-launch-by-2022-9qmswxdhg?shareToken=042292a2eea55a139294633a2ada6f65> (link last checked 27 December 2019)

2 <https://www.thetimes.co.uk/article/cost-cutting-and-crew-shortages-will-force-pilots-to-fly-solo-qx8f779mr?shareToken=9a563dbbbd2b35221d52816744bee3ae> (last checked 27 December 2019)

3 https://www.ati.org.uk/media/uwzcemps/ati-insight_12-single-pilot-commercial-aircraft.pdf (last checked 27 December 2019)

4 <https://www.flightglobal.com/news/articles/embraer-reveals-vision-for-single-pilot-ailiners-343348/> (last checked 27 December 2019)

5 1×10^{-3} for a single operator; reducing to 1×10^{-4} when two operators cross-monitor each other's actions

6 Comerford, D., Brandt, S.L., Lachter, J., Wu, S.-C., Mogford, R., Battiste, V. & Johnson, W.W. (2013). NASA's Single-Pilot Operations Technical Interchange Meeting: Proceedings and Findings (NASA/CP—2013–216513). Moffett Field, CA: National Aeronautics and Space Administration, Ames Research Center.

7 He was NOT a member of the Air Pilots!

8 <https://www.airpilots.org/career-matters/careers-information/aptitude-tests/> (last checked 28 December 2019)

GAZETTE

APPROVED BY THE COURT
23 JANUARY 2020

ADMISSIONS

As Upper Freeman

Graeme BAGNALL
Darren Joseph BROGDEN
Robin CAINE
Carol DEHN (AUS)
Edward George FIELD (AUS)
Nathan John GRAY (OS)
Giles HORNSEY
Stephen Andrew JENKINS (AUS)
Eva Claire MARSEILLE (HK)
Aaron Keith PEARCE (NZ)
James Stephen PELOW
Robert Hendrik PRANGE (HK)
Sam RODWELL (HK)
Luke Andrew REWEGA (HK)
Stephen WALLACE (HK)
Bruce Thomas WYATT (HK)

As Freeman

Timothy Peter BROWNRIDGE (AUS)
Christopher James CARTER (HK)
Pierre Gabriel CÔTÉ
Scott Richard CREW (AUS)
Anthony FLINN
David HALL
Kimberly HOMANS
Thomas MANNING (AUS)
Anthony Raymond PAGE (NZ)
Jarrod Jason PSAILA Esq (HK)
Stuart Donald SCOTT
Ian Richard WELLESLEY-HARDING

As Associate

Anton TOLIC (AUS)
Thomas Dylan WYATT (HK)

ACKNOWLEDGED BY THE COURT
23 JANUARY 2020

REGRADE

To Livery

Jan HOULBERG

REINSTATEMENT

As Upper Freeman

Peter John JOSLIN

DECEASED

Arthur CREIGHTON
Graham CRUSE
Martyn JOHNSON
Alan WALKER

RESIGNATIONS

James BINNIE
Angus CROSSLEY

David FIDLER (OS)

Ludo FORRER
Andrew FRY (AUS)

Terry GILL
Andrew LUCAS (AUS)
Tony MACKENZIE-PHILPS

Thomas MARTIN
Pamela MELROY (AUS)
Andrew TAYLOR

Daniel TYE
Gordon WADE (AUS)



601 (COUNTY OF LONDON) SQUADRON ROYAL AUXILIARY AIR FORCE

A PROFILE OF OUR NEW AFFILIATED UNIT

In 2019 The Honorary Company of Air Pilots and 601 Squadron agreed to affiliate based on a shared advocacy for aviation as well as a shared City heritage. 601 has a distinguished record which reaches deep into the story of the defence of London during the Battle of Britain, but with the cessation of flying within the RAuxAF in 1957, the Squadron was disbanded. It was reformed on 20 April 2017 at its new base, RAF Northolt, and now has a rather unique place within our Air Force. Its objectives include:

- To provide advice to the Chief of the Air Staff (CAS) and the RAF in general on important issues;
- To provide access for the RAF to new networks with which it does not have a traditional connection;
- To develop advocates for the RAF.

To this end 601 has an establishment of 10 Volunteer Ex-Regular Reserve (VeRR) officers, and up to fifty Honorary

Group Captains (HGCs), of which there are currently 30. The Commanding Officer Air Vice Marshal Malcolm Brecht is the senior part-time reservist on 601, and the Honorary Air Commodore of the Squadron is former CAS, Air Chief Marshal (ACM) Sir Glenn Torpy. Lord Maxwell Beaverbrook is the President of the 601 Affiliates and Alumni.

The idea of 601 in its current incarnation was the brainchild of Lord Beaverbrook, who retired last year as Commandant General RAuxAF, who along with other advocates for the reformation of the Squadron sowed the germ of the idea to the then CAS, ACM Sir Stephen Hillier. Sir Stephen along with the Air Force Board gave approval for the Squadron to be reformed in April 2017.

The selection process for squadron members is driven by demand from the RAF Senior Leadership Team for

Squadron members at RAF College Cranwell in 2018 for the presentation of Commissioning Scrolls to HGCs and VeRR members at its annual conference and dinner



particular skills or tasks. If they successfully pass the selection process candidates are appointed for three years, with the potential to renew for up to a maximum of nine years. They are subject to security screening and have to commit to 6 days of voluntary service per annum, although many HGCs give considerably more time than this to the Squadron. There is no pay, but travel and subsistence expenses may be reimbursed. After the nine-year period if not beforehand, members transfer to alumni status.

The Squadron recently formed an affiliates and alumni section: this is non-uniformed, and with no time obligation but affiliates and alumnus are invited to the majority of squadron events and are expected to be advocates for the RAF in the same way as HGCs. In addition to the three core objectives noted above, the HGCs are expected to act as partners/critical friends for senior officers in the Air Force, providing someone with whom they can informally discuss issues and challenges. In addition to the partner/critical friend role the Squadron also supports other tasking as required, including with groups supporting Business Transformation and Infrastructure.

Members of these groups have provided advice and access to assist the RAF with challenges in these areas, ranging from improving the processes for fuels procurement through hedging, to providing advice to Brize Norton on digitising the passenger handling process and information. Members have reached the furthest outposts of the RAF including the Falkland Islands and Cyprus. A further activity this year is likely to be support to Project Astra, a programme to “accelerate good ideas into service and blend them with a powerful and dynamic vision for our future”. 601 is also actively involved in supporting the charities surrounding the Service – the Central Fund, the Benevolent Fund, St. Clements Danes, and the RAF Museum which also shares a special relationship with The Air Pilots. This has now been formally recognised as a task for the Squadron and an area where it has already achieved some success for RAF Charities.

As 601 develops its support to the RAF, the benefits of the concept are becoming increasingly apparent and have the potential to make significant contributions to the areas highlighted above. Clearly 601 is no ordinary squadron and exists in a sort of virtual state. The whole squadron only meets together for a one-day annual conference, with the majority of members working in small teams or individually to support their RAF partners or task groups. The Squadron is still in its relative infancy but its ability to add intellectual depth to the RAF and aid its progression in the 21st century are increasingly clear. We look forward to a fruitful affiliation with the Squadron in the years ahead.

The above is a bowdlerised version of an original article by the Editor

601 SQUADRON - A BRIEF HISTORY

By the Editor



Ned Grosvenor, the founding CO

Founded by Lord Edward Arthur ('Ned') Grosvenor; son of the Duke of Westminster, in White's. Inspired by Wright Bros and Bleriot, Grosvenor gained UK licence number 607. When WWI broke out he gave one of his aircraft to the British Government, and flew the other to France, before offering it, and his own services, to the RNAS. After the war he visualised, possibly inspired by a gin or two at White's, a part-time air force, as a sort of successor to 'the old mounted yeomanry'. As from 1919 Trenchard was on the same wavelength. Each Auxiliary squadron should have its own "companionable mess and a distinctive life of its own".

Unsurprisingly the first members emerged from a dinner at White's. Sammy Hoare became its first Honorary Air Commodore, and it was christened 601 (County of London) Squadron, gazetted in October 1925: 2 regular officers, 21 airmen, and a handful of, presumably weary, Avro 504s. Ned, stocky of stature, and haughty of bearing, was CO; the first 2 flight commanders were his nephew, the other the son of the Lord Mayor of London. The pattern is clear!

Unimpressed with his service issue revolver, Ned carried a sawn-off shotgun in the air. But not the tool of bank robbers – Ned used a Purdey! The squadron's first summer camp – at Lympne – brought them into the orbit of Sir Philip Sassoon, the well-known (effete) friend of aviation, and chum of Ned's. It was soon that the squadron gained its moniker of "The Millionaires" Squadron." Ned designed the crest of a winged red sword of London.

If a normal start to the day for Ned and his colleagues was a couple of glasses of marsala, he did not accept anything but the best performance from his unit. On Grosvenor's early death (surprisingly of natural causes), Sassoon took command, despite his inability to fly. Future CAS Dermot Boyle was sent to 601 as adjutant with the express objective of teaching the CO to fly.



William Rhodes-Moorehouse



*Roger Bushell at the
squadron camp at West
Freugh in 1937*



Max Aitken snr

In this pre-WW2 era, one of the most illustrious squadron members was AC Shaw (aka Lawrence of Arabia). As war clouds darkened, one of the squadron's most impressive members – against stiff competition – was Roger Bushell, of Great Escape fame. A superlative pilot, and a character sufficiently magnetic to cause localised deviation. It was at this time that a rivalry, of a depth and level of cunning perhaps unequalled since, developed with fellow squadron , 600 (City of London). "Fellow" implies a degree of friendship which was clearly absent: the wind-ups and mischief were ever more inventive. Keen-eyed Company members whilst in the RAF Club might have noticed that the 601 crest is near-unique in displaying no squadron motto. (Allegedly) when the College of Arms noticed this omission and asked for suggestions, 601 came up with "Plus Sescenti". You do not need your Editor to tell you this means "More than Six Hundred"! This put the Heralds into an inverted spin. The squadron lacks a motto to this day!

In 1937 the squadron's skiing jolly (or AT as it would now be called) took them to Bavaria. This visit underlined to members the seriousness of the Nazi build-up of military power. By 1938 the squadron was equipped with the Hawker Demon. Almost exactly 12 months before the outbreak of war; a practice deployment to Biggin Hill (from its Hendon base) went smoothly. By September 1939 601 pilots were re-located to Biggin full-time, and flying the Bristol Blenheim – as a fighter! The famous Whitney Straight, by now a UK citizen and squadron member, paid for armour plating to be added to machines. The squadron's first mission was an ill-conceived trip to the German island of Borkum, with just their nose-mounted machine guns for weaponry. Despite the Blenheim's notoriously dodgy radials, they all survived. Re-equipped with the more sensible Hurricane, 601 moved to Tangmere.

It saw some action in the Battle of France, but more

interestingly, and unsurprisingly, it was asked to provide an escort for one of Churchill's last-ditch attempts to inject backbone into the French Government. Slippage in the conference meant Churchill had to remain in Paris overnight, so of course did the 601 chaps. Who naturally succumbed heavily on the temptations of the capital, and were rather ragged by the time of WSC's inspection of them at 0800 on the morrow. The squadron lost several men (including those sent hurriedly to other units) and machines in the protection of Dunkirk, and during the last days of the BEF. Not the least of whom was Roger Bushell, who was to go on to be the central figure in The Great Escape from Stalag Luft III.

Soon after Max Aitken took over as CO, he was awarded the DFC for scoring a rare night victory (a task for which neither the Hurricane nor the squadron was prepared) against a He 111, as a result of which he was taken from 601 to be given command of a dedicated Night Fighter squadron (68). At the height of the Battle of Britain, 601 was fully involved, and indeed lost four pilots on August 11th. DFCs and career-ending wounds came aplenty. The squadron was in the front line until September 6th, when it moved to Exeter; casualties had by then become plentiful with several of the pre-war characters downed. The squadrons started the Battle with 20 pilots, and finished with 9....

The period at Exeter coincided with a plunge in the squadron's morale, occasioned largely by the high turnover of members during the Battle. This resulted in a high accident rate, but by mid-December 601 moved back to the capital, at Northolt. It started operating Rhurbarb and Circus missions from a forward operating base at Manston. On July 1 1941 the squadron moved to the considerably less glamorous location of Matlaske (a satellite of Coltishall) to be re-equipped with the Bell Airacobra. 601 could work no magic with this dog of an aircraft, and, like fellow users, failed to become operational on it. Over the



Cocky Dundas



Squadron Vampires over Malta

following nine months the Airacobra claimed several squadron pilots in non-operational accidents.

Stuck at the muddy grass airfield of Acaster Malbis to the West of York, it is, in retrospect, surprising that, with its connections, 601 did not secure a change of stead earlier. But in Summer 1942 601 secured its chariot of choice – the Spitfire. However this came with a slightly poisoned chalice – the squadron had to move to the crucible of strife that was Malta. Unaccustomed to carrier flying, it was 12 very apprehensive pilots (together with colleagues from 603, County of Yorkshire, Squadron) who made their first ever carrier take-off, from USS Wasp on April 20. After a

successful landing at Luqa, 601 was unsurprisingly into action immediately. Conditions on the beleaguered island were far more Spartan than that to which they were accustomed. Life for the ground crews was equally tough.

By mid-August the Siege of Malta had been lifted, and the battered, but very combat-proved, 601 was sent to Alexandria to take the war to Rommel, or rather to help provide air superiority for the retreat of the British Army. If the pilots of 601 thought they could languish between sheets of Egyptian cotton after the months of hard living on the island, they were soon disabused – the squadron moved between a succession of landing grounds in Egypt and Westwards.

Back in Malta by July 1943, 601 provided air cover for the invasion of Sicily, to where they moved in due course. They then followed the Army up Italy in a ground attack role. This became a hazardous activity, not just due to the increasing accuracy of the Wehrmacht's anti-aircraft fire, but also because of a batch of faulty detonators in the 500lb bombs they were dropping. By now the squadron had reached a double century of enemy aircraft destroyed, but the score moved slowly due to the rarity of the Luftwaffe in the skies above Italy. The cast of squadron members had taken on a multi-national hue, but

its esprit de corps remained, and as the war neared its close, the squadron's operational tempo was of the highest. 601 was disbanded in May 1945 at Treviso.

On 10 May 1946 the Auxiliary Air Force was reformed – as the Royal Auxiliary Air Force, and 601 restarted recruitment at Hendon in June, with Max Aitken as CO (whilst also serving as an MP). In the team was Flying Officer (formerly distinguished Group Captain) Cocky Dundas, to become a successful CO not long after.* Prince Philip became Honorary Air Commodore, and took an active interest in 601. Such was the response shown to modest recruitment efforts that the interview bar was set at a minimum of 1500 flying hours. By the end of 1946 601 was back in the air flying Spitfire XIVs. In 1950 601 moved into the jet age with the Vampire Mk III; only 2 of its 4 cannons were used, and when they were *"their recoil almost seemed to stop the aircraft in the air"*.

In 1954 the Norman Conquest began: the three sons of Sir Nigel Norman (CO in 1931) joined in quick succession, including Desmond - *"I have completely forgotten what it is like to sit in a cockpit without a hangover"* and of later Britten Norman fame, and more dubiously, one of the few to have done an outside loop in a Meteor. And Torquil, former owner of some of the contents of Liveryman Peter Grenyer's toolbox. In this era, based at North Weald, 601 had four successive summer camps in its old stomping ground of Malta, but in 1955 visited the old Luftwaffe base of Wunstorf, by now on Meteor 8s.

The Normans had a colleague named Denis Shosbree: the tale of his inverted low pass over the rugby ground at Richmond - when the Air Council were watching the annual RAF v Army game – is perhaps best left unreported, suffice to say that 601's by now legendary PR skills ensured an ending which, whilst not happy, was satisfactory for all concerned. This incident did not prevent Shosbree from becoming a captain with BA, and later, Virgin.

Despite the highest level lobbying, in November 1954 Harold Macmillan wielded the axe on the RAuxAF as a flying force. Prince Philip took the salute for the final march-past from the Town HQ on Kensington Park Road on 6th March 1957.

For further details see: **The Millionaires' Squadron**, Tom Moulson (former squadron member), Pen & Sword, 2014

*The first boss of the Editor's sister.

Photos via the excellent website www.601squadron.com



The squadron with its Meteors at Malta

VISIT TO RAF BENSON

25 NOVEMBER 2019

By the Editor

Another 2019 visit cursed by the weather. Although well over-subscribed, no members were in the end able to fly in to the Oxfordshire air base. Our host for the day was Sqn Ldr Tim Smith, familiar to those of us who had been on the previous visit to Benson in November 2017 (see Air Pilot Feb 2018), and now in charge of training, until he reaches the end of his tour very shortly.

Our first stop was the Tactical Control Centre, part of the facilities operated by CAE under a PFI arrangement since 1997. Bob Gelly, the ex CFI of this facility, is ex-RAF, as are his QFI colleagues. The software and imagery continue to be improved. It is located in the same building as the 6 sims (3 Chinook, 2 Puma and 1 Merlin) – all of which can be connected via a LAN. After helicopter training at Shawbury, all graduates come to this facility for 2 weeks of Puma ground school. Additionally CAE hosts international students here, who contract direct with CAE. Once on a squadron pilots revisit the facility twice a year for a refresher package, and also for pre-deployment training ahead of a tour in Kabul (to which there is a steady stream of crews providing a taxi service). Pilots on the Medium Support Helicopter Force will typically have their training hours split fairly evenly between synthetic and airborne, although those on the Merlin have a slightly higher synthetic proportion.

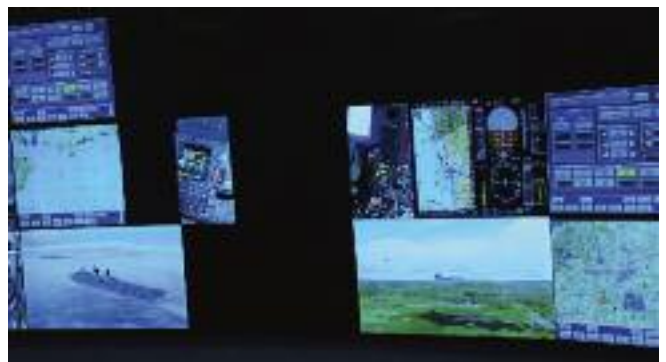
Additionally Helicopter Tactics Instructors are trained here. Qualified staff from other bases are brought in as necessary to control other assets in complex scenarios.

Then it was our turn to take a brief flight in the Chinook sim, under the experienced tutelage of Flt Lt Mike Reynolds. Mike had taken speedy advantage of the relaxation of rules (on September 1) allowing RAF members to wear beards. (After a case of hypoxia this was soon rescinded for Typhoon crews!)

The screen became a sea of red – Chris managed to hit a tree backwards. Then it was the turn of Assistant Dacre Watson, who aborted his attempt to gain the left hand seat with the immortal line “I couldn’t get my leg over”. Whilst the Editor could get his leg over, his allotted 5 minutes seemed to fly by, as they say.



Sqn Ldr Tim Smith welcomes us



Tactical Control Centre display



Graham Powell stable on the ground in the Chinook sim



Legover issues



*The Station
Commander
gives his end of
year review*



Before lunch we were given a very warm welcome by the Station Commander, Gp Capt Adam Wardrope (an experienced Chinook pilot). He gave us an overview of his station's experience over the last 12 months: an acute shortage of engineers had made itself felt in a shortage of operational airframes. This had now been rectified and the flying rate had trebled in two months. Several aircrew had returned in March from gaining full environmental qualifications in the USA, and in March the station had celebrated its 80th anniversary. The downside was that much of his infrastructure was showing all of its eighty years. As a legacy of underfunded maintenance and replacement budgets of the past, maintenance now is "hard going" (a familiar refrain from operators of many of the UK's military assets)!

Resurfacing of the single runway at Northolt had caused the Royal Flight (aka 32 Sqn) to relocate temporarily to Benson (where it had resided for 54 years). This made the station seem happily busier, but 'processing' VIPs brought new problems. Gp Capt Wardrope noted with justifiable pride that whilst 32 had enjoyed 70% serviceability at Northolt, it enjoyed better than 90% whilst at Benson. The Kabul deployment, whilst still classified as temporary, has now been running for 5 years: his crews have a mission completion rate of 98% during their 3 month tours, which come round every 15 months. This has led to high utilisation of the Puma 2; the type, introduced into RAF service only 5 years ago, is about to achieve 30,000 flying hours, of which a remarkable 33% are on ops. His Pumas fly in met conditions unsuitable for most other Coalition assets, and cope with the hot and high conditions better than the Merlin. Nonetheless this operation soaks up a lot of engineering support.

One of the highest profile operations (for a domestic audience) that the RAF had been engaged in in recent months had been the flood relief operations in Derbyshire and South Yorkshire. Whilst the airframes utilised were predominantly Chinooks (from Odiham), all ground staff were from Benson (from the Joint Helicopter Support Squadron).

No replacement for the Puma II has yet been mooted, and it is likely that its service life will be prolonged beyond its current official end of service date of 2025. As on our previous visit, we were very impressed by the speed in which it can be disassembled, (two of them) squeezed into a C17, and reassembled at the other end.

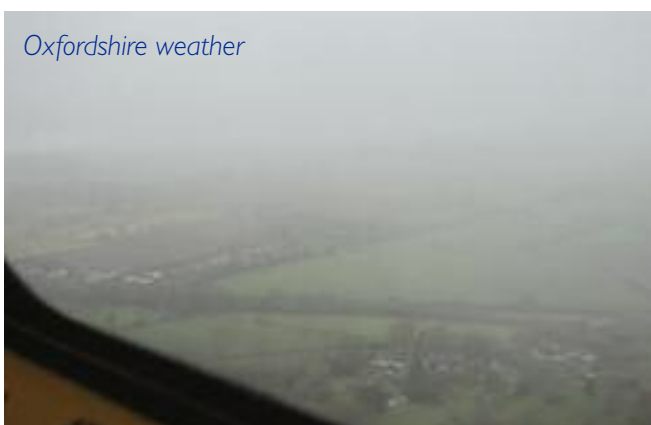
During these talks anxious glances were cast towards the crew room windows, as we had an inkling that a Puma ride was possibly on the cards. The viz and cloudbase were



Apprehensive passengers



Rotors running passenger switch



Oxfordshire weather

changing by the minute, and usually for the worse! However 33 Sqn were undaunted and took us all (in two serials) for a tour of Oxfordshire. Not so sadly, the cloudbase dictated this had to be at low level. The Puma II can accommodate "up to 16 pax" in a trooping role. I can confirm that 16 squaddies would be a tight squeeze. As it was, well upholstered Members, despite having no bergens, had little room for manoeuvre. The Editor made a tactical mistake, or lacked sharp elbows, and was dumped at the rear, from where the view was somewhat restricted. We were grateful that the Loadmaster enjoyed fresh air, and was reluctant to shut the door in the cruise.

At the wash-up session we were delighted to see Wg Cdr Chris Royston-Airey, now OC 33 Sqn. He had just returned from Ex Himalayan Rider; a jolly (correction, Adventurous Training) around Nepal on motorbikes. Chris noted that the affiliation with the station had started whilst Dorothy Saul-Pooley was Master, and he hopes it will go from strength to strength.

The hospitality from Gp Capt Wardrope and Tim and Chris was so warm that it warded off the cold as we left a darkening and damp Benson sky. Until the next time!



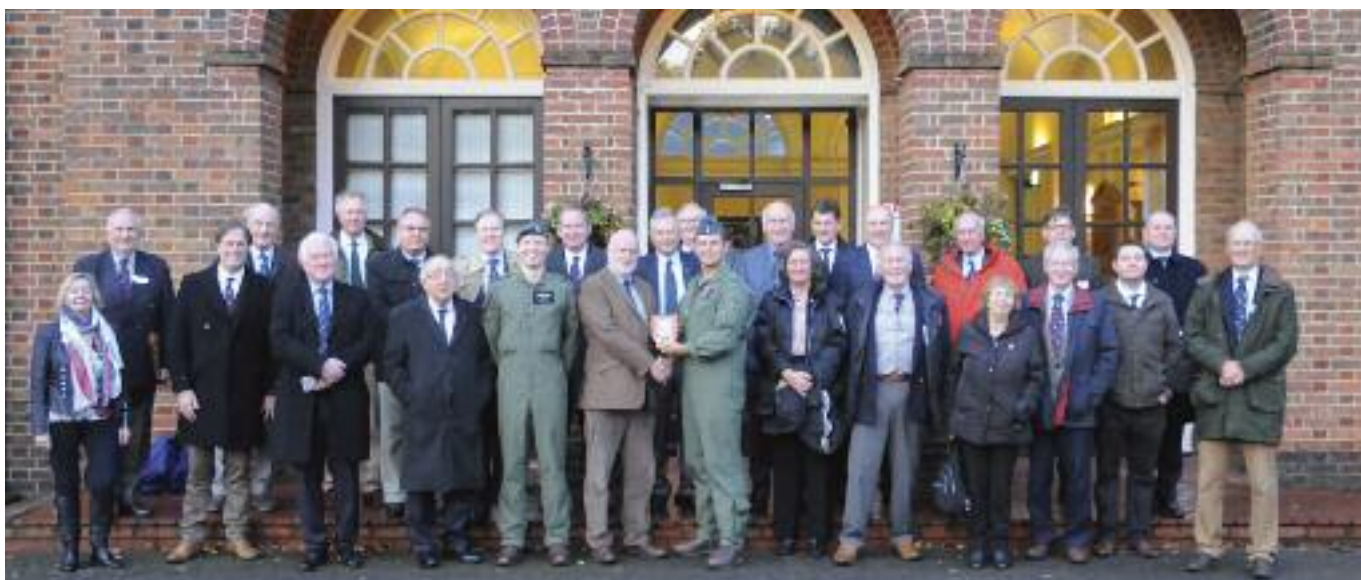
The Loadie loves fresh air



Assistant Dacre Watson presents a Company plaque to Wg Cdr Chris Royston-Airey



John Davy finds it less comfortable than a Cirrus (photo Ian Davies)



SELECTION FOR OUR COMPANY FLYING SCHOLARSHIPS - HOW IT WORKS

by Scholarships Committee Chairperson, Assistant Tricia Nelmes

On November 21st 2019 our PPL and Flight Instructor (FI) scholarship winners, some of whom you can read about in this edition of AirPilot, came to Cutlers Hall to be presented with their Scholarship Certificates. Once again it was a markedly more confident and focused group of young people than we had seen at their interviews back in May. After fifteen years of involvement with our scholarship scheme, this still remains my favourite event of the year.

The exact number of scholarships flown varies from year to year depending on sponsorship. In 2019 the Company made 11 PPL, 3 FI and 16 Gliding awards.

We have three separate selection panels for our Gliding, PPL and FI scholarships, each with their own expertise. The panels are composed almost entirely of people who have jobs to go to, and it always strikes me as verging on the miraculous that they all manage to get time off work at the right time to interview. PPL applications are by far the most numerous at 450-500 each year, so for these we also have the support of a large team of application sifters drawn from members from all areas of aviation. The scholarship scheme is dependent upon a total of around thirty volunteers giving up their time to help us, plus Angie in the office who does our admin and who is an essential part of the team at all stages.

Our FI scholarships are intended for those aspiring to careers in instructing and the selection panel is chaired by Caroline Smith. The Gliding panel, led by Bobby Gallagher, selects from mainly school age youngsters, with those who are successful attending five day residential courses.

Throughout the summer months the PPL team all see the weekly reports coming in from the scholars so that we can jointly monitor progress as we go along. Completing the PPL course by the deadline and within 45 hours is a significant challenge and at the end of the season it falls to us to choose the winner of the John Landymore trophy for the best PPL scholar. It's usually a gratifyingly difficult decision.

Of our team of ten or so members of the interview panels, five have received company scholarships in the past. Most of the rest of us have benefitted from scholarships from other sources, so we know how valuable it is to have that foot up onto the aviation ladder. Five of the interviewing team are current airline pilots, two are ex-RAF and four are instructors. Each year we introduce and

train new, younger, interviewers who can then assist as their work commitments allow. It's a real team effort and I believe that the team's strength comes from its diversity as well as a shared sense of purpose.

What becomes of our scholars after their courses? Many of the PPLs go on into airline careers, a few into the RAF, and some remain in GA alongside other aviation-related careers. The FI scholars are selected for their intention to work in instructing for a significant period of time, though some obviously move on into the airlines in due course. For our gliding scholars, their five day courses provide an introduction to the world of aviation and some pursue this further and either continue gliding or apply for PPL training in subsequent years.

Our congratulations go to all of this year's scholarship winners. We have enjoyed following their progress thus far and wish them all well in their future careers. Finally, I would like to express my own thanks to all our volunteer sifters and selectors. It's a large amount of work but so worthwhile.

If any member would like to know more about what we do, please contact me at tricia.nelmes@gmail.com.

Four of the 2019 six strong PPL interview panel at Cutlers Hall. Left to right, Liam Bennett, Steve Dean, Asst Tricia Nelmes and PM Chris Ford. (Absent flying were Kat Hodge and Oli Russell.)



AIR BP STERLING SCHOLARSHIP REPORT

KRISTOFFER AHLNER



It has been a boyhood dream of mine to become a pilot after being captivated at a young age by the inexplicable feelings of freedom and escapism that are associated with flight, along with the fascination of the engineering marvels of modern aircraft. I remember receiving a flight simulator program for a birthday, and subsequently spending hours flying around (virtually), wishing it was the real thing! At the age of 13, I had my first taste into flying through gliding, initially starting as an affordable and early route into aviation, however I very quickly fell in love with the beauty of the sport and have continued to keep gliding as a hobby.

Having heard first-hand the incredible opportunity that this scholarship offers, I was eager to apply. The application form is a concise but thorough introduction of yourself and your motivation. I was fortunate enough to then be selected for interview, which in itself is an invaluable experience and practice for anyone looking to be involved in the aviation world, and less than a month later I was delighted to hear that I had been awarded the Air BP PPL Sterling scholarship.

I started training in late June after A-Level exams had finished. The Air Pilots had been fantastic in helping support my choice of flying school - allowing me to attend my first choice Stapleford Flight Centre. I was quickly acquainted to my instructor, Jun, and later a second instructor John, who were both ready and eager to push me forward and achieve the goal of gaining my PPL by October.



We covered a lot of exercises in the first 5 hours thanks to transferrable skills from gliding. I thoroughly recommend gliding to anyone wanting to step on the first rungs of the ladder of aviation as it is a highly cost effective and enjoyable way of getting into flying. After completing five and a half hours of training and the Air Law ground exam, I was ecstatic to be sent solo for the first time. The first solo flight is a once in a lifetime feeling, when you are trusted for the first time for the safe conduct of the flight all on your own, a surreal experience!

After my first solo flight it was on to more advanced skills such as navigation and more complex air work. Aside from my first solo flight and achieving the PPL, the most enjoyable part for me was the navigation. There is something about being able to fly across counties in less than an hour, whilst also enjoying some spectacular views. Having flown a couple of sorties around my home county of Essex and neighbouring Kent, I embarked on my first solo cross country flight. It was slightly daunting switching over the radio for the first time on your own, knowing that you have to trust your training and ability. However, once again there is an immense sense of satisfaction and achievement having successfully completed a solo cross country which encourages and fuels you to do more.

I enjoyed every moment of training, however there were certainly some stand out flights. One day my instructor and I were trying to decide where it was best to explore next. Coincidentally Reading Festival was on that weekend, so therefore we made the short half an hour flight across to say hello to friends enjoying the festival! Not only was this a fun experience, but also very beneficial it routed me over new areas with fairly complicated and delicate airspace which helped improve my navigational skills.

Another memorable flight during training was a land away to Duxford. Having set out from Stapleford, we routed around the Stansted airspace and before we knew it, we were requesting the airfield information. What is perhaps unique about Duxford is that it is a hub for classic aircraft



experience flights. It was slightly surreal to be sharing the circuit with Dragon Rapides and Tiger Moths! The highlight of the trip however was seeing a Spitfire taxiing merely meters away after shutting down and securing the C152, something you only get to experience through the wonders of general aviation!

Aside from the flying, the scholarship also presented a unique opportunity to attend a congratulatory event at Air BP's headquarters, in order to celebrate their fifth year in supporting young people achieve their dreams. It was a very enjoyable and insightful day. We were also fortunate enough to meet and talk to the CEO and other high-ranking members of Air BP, where we heard about the world of refuelling and the global operations of Air BP. It certainly surprised me how much goes on behind the scenes to make commercial aviation both possible and safe.

Later on in training, I embarked on my Qualifying Cross country, a flight more than 150nm long, landing away at two other aerodromes. My route took me down over Kent to the seaside airport of Lydd, before routing north overhead Southend airport to Earls Colne, and then retuning back to Stapleford. The final milestone was the general skills test. Since the start of the training, it had always been at the back of my mind. However, my apprehensions were relieved both throughout training through mock tests and practicing content, but also after receiving the briefing with the examiner. After the minimum 45 hours required, I was recommended for the test and crossed my fingers for good weather on test day! Fortunately, the conditions were lovely, and I had a very enjoyable flight with my examiner, who was great at making me feel at ease. After landing and hearing the news I had passed my PPL I was absolutely ecstatic, but also slightly sad that it had all come to an end!

The scholarship has been, hands down, one of the best experiences of my life - I cannot recommend the scholarship highly enough. Not only does the generous scholarship cover all flying, exam and revision material costs, the Air Pilots are also fantastic in supporting students along the way. The training can be intense, and the commitment needed should not be underestimated from the theory revision, to the amount of days needed to be dedicated to achieving your PPL (the great British weather will often disrupt your flying plans!). However, the rewards are simply unparalleled. The sense of achievement and reward is so strong and will definitely leave you craving for more!

Achieving my PPL and taking the first step towards a career in aviation has been a great ambition of mine, however due to the financial barrier of training, it would never have been possible without the generosity of the Honourable Company. It has been an immense privilege to have been Air BP's fifth Sterling scholar, and I am forever grateful for both Air BP and Honourable Company's generosity for providing unparalleled opportunities for young people to get into flying.

GRAYBURN SCHOLARSHIP

DAVID BELL



Ever since I started school, when asked what I wanted to be when I grew up, I would always answer: "I want to be a pilot", so when I found out about the Honourable Company of Air Pilots' scholarships I was interested immediately.

Over the previous few years leading up to my application, I had been a member of the Air Cadets, where I had been very fortunate to be awarded two earlier scholarships: the Leslie Worsdell Scholarship (LWS) and the Air Cadet Pilot Scheme. From these scholarships I had developed a strong base knowledge of airmanship and had successfully gone solo during the latter.

After being awarded the Grayburn Scholarship to finish my PPL, I left my gap-year job at Amazon to pursue the PPL full time, and booked in two months of flying lessons with between 5 and 10 lessons per week at Cambridge Aero Club, which – incidentally – was where I had first flown as part of the LWS, so many of my instructors were familiar faces.

Getting back into the circuit had some challenging moments; I tended to fly the approach too high, and it took me a few lessons to get back on track. However,



before too long, I was back to flying circuits solo again! The next major milestone was moving onto navigation. It was exciting to be able to go further afield, to see East Anglia from the air and land away at Sywell and Conington.

My favourite flight so far was my qualifying cross country – my route took me again to Sywell and Conington, then to the Norfolk coast where I was able to enjoy some impressive views before heading home for Cambridge. The feeling of accomplishment to have flown such a long route was immense and I was excited to be so close to my skills test and ultimately achieving my PPL. I had my skills test in early August, which was both exciting and daunting – I knew it would be hard work but I

couldn't wait to get my licence. However, unfortunately during a diversion in the navigation section of the test, I became lost – it had been a few weeks since I'd used my diversion plotter and in the excitement of the test I misread the track to our destination. Despite this upset, I was able to complete the other sections of the test without a hitch. A few days later, on the 7th of August, I retook the navigation section, having ditched the diversion plotter's compass rose for a small protractor; something I was far more familiar with from my maths lessons at school. This time I was much more successful!

Since completing the scholarship, I've been able to fly for a few more local flights, including taking my Dad flying for his birthday - which was particularly poignant as it was his interest in aviation that kindled mine. I'm hoping to complete my night rating over the Christmas period and to try a farm strip course next summer. Once I've finished my degree in Theoretical Physics, I plan to work towards becoming an airline pilot, preferably through one of the cadetship schemes that companies such as British Airways offer.

I'd like to use this opportunity to thank the instructors and staff at Cambridge Aero Club for their exemplary instruction, the Honourable Company of Air Pilots for giving me this wonderful opportunity to fulfil a lifelong dream, and Michael Grayburn, a Past Master of the Company for generously sponsoring the scholarship.

DONALDSON SCHOLARSHIP

ELTON HOVE



window, I knew nothing would compare to sitting in the

The summer of 2019 has been a summer like no other. I never imagined I would have the opportunity to kick start my journey in achieving my dreams this early - as much as I have always enjoyed being a passenger observing the world of aviation through a



left seat, as I have been able to do these past few months.

From a young age, my interest in aircraft and toy airplanes always seemed to overshadow my interests in ships or trucks. But it was only after meeting a pair of pilots visiting my high school that I was convinced the aviation industry is where I belonged. And so, a few years later, when I discovered the Air Pilots after a meeting with my college careers department, I had a more definite idea of how my career in aviation could begin. After submitting my application, my heart was racing, certainly after reading the email confirming I was selected for an interview.

Taking the train down to London, suited up like many of my fellow passengers on their commute to work was another new experience for me, but it was definitely a confidence booster as I became a part of the surroundings of the busy day. It was calming to see and talk to the other candidates as the morning went on and I soon felt at ease. On the journey back, I considered the positives and negatives of the interview: what I could have done better but more importantly what I could take away for future reference. Without a doubt, it was rewarding to have the opportunity to be interviewed by members of the industry and spend the afternoon exposing myself to the community. I immediately dropped everything and stopped when I saw an email from Air Pilots a few days after the interview, attempting to lower my heart rate and prepare myself for the worst I opened the email. Never had I felt so calm yet excited after reading the word "Congratulations".

I wasted no time in finalising my choice of ATO having known them for well over a year. June 1st rolled by and I jumped on the first opportunity to start my PPL. As I didn't have college that day, I made my way to the airport to experience the first of many hours I would complete over the summer. It was very refreshing to get back in the sky after 6 months and I felt revived in my determination of my dream. I was soon made aware of the poor man's autopilot, the trim wheel, and more during my first week and I couldn't help but grin after making my first assisted landing and take-off.

To this day, I still remember my first major milestone. Just like the cross country, it was a right of passage I couldn't wait to experience. As nervous as I was, I couldn't help but

savour the moment as I looked right and saw the seat beside me empty. All my attention was focused on operating the aircraft safely back down to the ground and it was a proud moment as I heard the tyres screech upon contact with the runway. I had completed my first solo. Days passed by and I took every opportunity I could to fly, often flying twice a day. I was truly living and breathing aviation and my training was coming along quite well. I knew it was important to pour as much effort into ground school as I did into flying, in order to keep on top of the exams. Diving into the material for each exam was always interesting and it was nice to get a look at the subjects I would be studying for my ATPL ground exams. Navigation was the most challenging subject I studied given the new concepts I was introduced to and the use of new equipment for planning. It was a relief to pass the exam the first-time around. What followed was what I consider by far as the most enjoyable part of my PPL. I wasn't just flying anymore, I was navigating. My adventures took me north, west, east and south and I really got to experience the freedom flying gives you.

After completing my QXC flight, venturing off to Peterborough Conington and up to Humberside, I was now close to finishing. I began to prepare for my skills test by practising manoeuvres, and fine tuning what I could with the aid of my instructors. I watched videos and spoke to people who had already done their skills test to gain as much insight as possible. Though my confidence grew, I still turned up with a stomach full of butterflies on the day. With nice weather and a moderate breeze from the south, I sat in the aircraft ready to prove I was competent and deserving of the license. It was like a rehearsal as I went through my checklists whilst feeling a sense of sureness as I communicated my actions to my examiner. I let out a sigh of relief as I turned onto final for Runway 20, I was now back in familiar territory and it was time to make my final landing that day. Once sitting back on the apron, I was comforted upon hearing I had passed my skills test, as I could now send my paperwork to the CAA and close this chapter of my story.

I wouldn't have been able to write this report detailing the quickest yet best summer of my life if it wasn't for the generosity of the Honourable Company of Air Pilots and its benefactors. It has been a privilege to be able to look back and re-live the memories of gaining my PPL and I'm sincerely grateful to Mr Donaldson for making this a reality. I'd also like to extend a thank you to the interview panel; to Ollie and Steve for taking the time to sit with me - a lot was learnt that day and I'm better equipped for my future because of it. I cannot forget Angie for the countless hours she continues to spend to make this all possible. Your continued support from the very beginning, up until the end has been invaluable. I can't thank you enough for guiding me, helping me make the most out of this opportunity. To everyone at Air Pilots that has been

involved along the way, thank you for your contributions. I'm now one step closer to achieving my dreams.

A huge thank you to my instructors at Yorkshire Aero Club for showing me the ropes. Your lessons were filled with humour and knowledge and your methods and approach to flying have formed the foundation of my success. You enriched my life through your experiences and expertise, always inspiring me to spread my wings. Although I have come to the end of my training, you have forged a relationship that will last forever. Lastly, I thank Jayne for going above and beyond her duties. Your desire to see me succeed is a testament to the passion you share with students like me. Together we made this possible and I'm grateful for always having you in my corner.

This is just the beginning!

SIGNATURE AVIATION SCHOLARSHIP HARRY THOMAS



I have been involved in aviation for a number of years now. I've been a member of the Air Cadets for 5 years and flew with them every opportunity I got. I also started gliding at a local club aged 14, which is something I would recommend to any aspiring pilot. Here I progressed to solo quickly and later added a Bronze endorsement to my licence. It was these early experiences that reinforced my childhood ambition to become a pilot.

A highlight of my Air Cadet career was being picked for the Air Cadet Pilot Scheme at Dundee. This was a 2 week residential course, providing 12 hours of flight training with the aim of soloing before the end of the course. My previous gliding experience came in useful and I soloed after 10 hours.

Wanting to progress my flying career I began to look into the costings for a PPL. Unfortunately, like many other people, this was something I couldn't afford. Exploring scholarship options I came across an article in Flight Training News advertising PPLs through the Honourable Company of Air Pilots. After my initial application I was



delighted to find out that I had been invited to their offices for an interview.

The day finally came, and I set off for London. It was fair to say that I was very nervous, but I had confidence in myself and my preparations. Getting lost certainly didn't help with any of the nerves, but I eventually arrived and had time to settle in. The interview was tough but I tackled it well, my preparations had paid off. The other element to the selection was the exams. Despite everything at stake, I really enjoyed taking them. The next day at school was a write off, as I spent the whole day checking my emails every 5 minutes! At 3.22pm the email finally came and the first word that jumped out at me was 'Congratulations'. I was over the moon and couldn't wait for my A-levels to finish.

A couple of weeks later I began my training with the Peterborough Flying School at Sibson Aerodrome. Initially, it was very intense balancing my other commitments around the flying lessons. Throwing myself into it, I soloed within a couple of weeks. After consolidating for another week, I moved onto my navigational training. Personally, using the navigational aids was the most challenging element of the training. One of the most interesting experiences was preparing for my cross country, during a practice we

completely lost radio communications and we had to cancel the exercise. This was certainly a challenge, but it was great to go through the experience.

There were a number of days where the weather ruined any chance of flying, however, they were not wasted days as they allowed me to revise and take the 9 exams that are required for the issue of a PPL. I'd previously studied the subjects on an Aerospace Instructors course with the Air Cadets and this no doubt helped me pass them all first time.

After successfully completing my navigational exercises with flights to Gamston, Cambridge, Wellesborne, Sywell and Leicester it was time to move on to practicing for my skills test.

Before this next phase started, following a very kind offer from Lucy and Brian at my sponsors, Signature, I took a day off from training to visit them at Luton Airport - an amazing and very informative day. I gained a real insight into the world of general aviation and FBO operations.

After a week of brushing up on general handling skills and practice engine failures it was time for the dreaded skills test. The weather on the day was on the poor side, but still flyable. My instructor and the examiner both did their best to put me at ease, but the best thing that settled the nerves was getting airborne.

The first part of the test - general handling - went very well and we then moved onto the navigation phase. The flight to Silverstone started well, but the weather began to deteriorate and as we approached Silverstone I made the call to divert. The planned diversion worked well and 30 minutes later we were back at Sibson having tracked East then North. With the debrief out the way, the examiner told me I had passed. Certainly a day to remember!

As someone who has wanted to fly for so long, I still wake up in the morning and find it hard to believe I am now a PPL holder, free as the proverbial bird, (whilst still respecting airspace restrictions)! I'm still only 18 and this is just the start of my flying career. Wherever I end up and whatever I end up flying, if anybody asks, I will always say that it all started with an Honourable Company of Air Pilots scholarship.

Finally, I would like to take this opportunity to thank everyone involved in the scholarship process. The past winners for their advice on applying and interview prep. Angie Rodriguez at HCAP for making me feel relaxed on selection day and for answering all my questions and on the selection panel for my interview and having the faith to pick me. Signature Aviation for funding the scholarship. Lucy Loneragan and Brian Humphries at Signature for inviting me to look round their facilities at Luton airport and for the career advice and finally, Charles McGregor at Peterborough Flying School for teaching me to fly so well.

Blue skies everyone!

SIR SEFTON BRANCKER SCHOLARSHIP

FREDDIE BULL



Having been actively involved in aviation since joining the Scottish Gliding Centre aged 14, I had long been aware of the Honourable Company of Air Pilots' PPL scholarship and its ability to help me fulfil my goal of becoming a commercial airline

pilot. Applying in February 2019, the scholarship would allow me to complete my PPL in the summer straight after leaving school, in time to progress to ATPL ground school programmes in October 2019. Alongside completing the application form I drew up a detailed plan of exactly how I was going to manage my summer in order to allow successful completion of my PPL within the given time. My plan also detailed my skills and personal qualities which I would utilise to allow me to meet the target dates. The application and interview process was successful - albeit nerve-racking - and I was absolutely delighted when I received the email to say I'd been awarded a scholarship.

I started training at Tayside Aviation, Dundee, in mid-June 2019, starting with the basics of handling the aircraft. With over 140 hours in gliders I found the initial lessons second nature; more challenging however was getting accustomed to the secondary controls not found on gliders, such as carb heat, mixture and flaps. I quickly progressed onto stage 2 - Circuits. I was used to flying circuits in gliders, however again I found the differences both interesting and challenging. Different flap settings altered the approach dynamics while practice emergencies required memorised checklists and radio calls. Both made interesting additions to my existing skills, let alone the fact that I now had the ability to go around if the approach wasn't going well!

Stage 2 concluded with a 45 minute check flight followed by first powered solo flight, a special moment made even more memorable by having to go around and change runways on final due to a change in the wind. Stage 3, an introduction to navigation, started with an equally as memorable moment. When checking the NOTAMs pre-flight, my instructor and I noticed that the Red Arrows were forecast to pass through the area around Dundee during the time of our flight. This momentarily perked our excitement however we quickly moved on as we got on with the flight planning process. This calm of routine was short lived as during our power checks Red Arrows Squadron Leader Martin Pert contacted Dundee tower. He reported they were 50 miles to the south of the airport, cruising at 1000ft and estimated passing three miles to the west of the airport in five minutes' time. My instructor and I continued our checks, ensuring we didn't step on a radio transmission from the Reds, and departed the westerly runway soon after. At 400 feet on the climb out I spotted the nose lights of the approaching Hawks,

around 10 miles to the south, slightly above and, most notably, on a constant bearing. As we neared 1000ft, with the Red Arrows having declared us 'in sight', my instructor and I concluded we might be about to get slightly too close to the jets and so turned left, continuing our climb to allow the Red Arrows to pass around 500ft below us! Looking down as the Red Arrows pass beneath you is certainly a unique view and definitely a stand out moment in my flying experience so far.

The remainder of stage 3 passed without incident. Particularly interesting was the extent of planning that goes into each flight and the accuracy of navigational techniques involved, with some navigation legs worked out to the second! Next was solo navigation and landaways in preparation for my Qualifying Cross Country flight. My first solo landaway was to Fife - a 700m tarmac runway, around 20 miles to the south of Dundee. This was a particularly special flight as Fife airport was where my passion for aviation began. With the runway just a few hundred yards from my house, every day before and after nursery I would go with my parents down the country road and watch for hours as everything from Sopwith Camels and Tiger Moths to Cessnas and Beechcrafts flew circuits and aerobatics around the airfield. To land there myself, with my family watching, felt like I'd come full circle. It was a satisfying waypoint to see how far I'd come from the four year old who watched with awe from the other side of the fence. After a few false starts due to weather, I successfully completed my QXC, landing at Fife and Cumbernauld airports as well as transiting Leuchars and Edinburgh airspace before flying over the mountains to Laurencekirk and then back to Dundee.

Preparation for my skills test largely consisted of navigating to yellow dots on the map to test my accuracy as well as some revision of upper air work covered in stage one. After a successful mock skills test, my actual skills test passed with little issue, and after a brief revision of field landings the following morning, I had passed! Following my skills test I signed up to the Fast Track commercial course at ACS flight training in Perth, where I have converted to and started my hours building in their Cessna 152 aircraft. I have also started studying for my ATPL exams with my first three exams booked for November 2019 and I have logged three hours in a PA-18-150 Super Cub, which will assist me in commencing glider towing at the Scottish Gliding Centre early next year. I would like sincerely to thank the Air Pilots for giving me such invaluable assistance, not only through this scholarship, but also via several gliding scholarships, such as funding my instructor's rating. Without financial support I would still be working to save up enough money to fund my PPL. The Sir Sefton Brancker scholarship from the Air Pilots has allowed me not only to complete my PPL in as short a time as possible, but also to start further training towards gaining my commercial licence.

SQUADRON LEADER BRIAN LETCHFORD SCHOLARSHIP



OLIVER SUMMERELL

My Passion for aviation started from a young age with my family being involved with Air Cadet gliding and also a vintage glider syndicate. This is where I first started to fly, in an old Air cadet Sedburgh (T21) glider with family members. At the age of 15 I was awarded a gliding scholarship at Bristol and Gloucestershire gliding

club. Here I learnt to fly properly for the first time and after a few months training I finally completed a solo flight in a glider. The following year I was lucky enough to be awarded the Air cadet pilot scheme scholarship. I was given 12 hours of powered flying which I completed at Tayside Aviation in Dundee. Unfortunately due to weather I did not go solo. Being close to solo I continued to fly at Staverton with Cotswold Aero Club and after a few hours completed my first powered solo flight. Since then my main hobby has been gliding at Nympsfield with BGGC where I have now completed over 150 hours, completed my Bronze and Cross country endorsement, silver, gold distance and diamond goal badges. I recently completed my Basic Instructor qualification where I take trial lesson flights with members of the public. I have also competed in 2 UK Junior gliding national championships, where this year I won best under 21.

It was my ambition to complete my PPL and progress my powered flying so I first applied to the Honourable Company of Air Pilots for the scholarship in 2018 and reached the interview stages. Unfortunately I was not successful. I was not deterred by this I reapplied for the 2019 Scholarships and again was selected for interview. A few days after the interview I was so happy to find out that I had been successful this time and was awarded the Squadron Leader Brian Letchford Scholarship. I chose to complete the Scholarship with Cotswold Aero Club at Gloucestershire airport as this was local and it was already familiar.

In June I successfully completed my A Levels and so had the whole of the summer ahead of me to focus on the scholarship and completing my PPL. A few weeks before the end of my A levels I took a trip to Cotswold Aero Club to meet with the CFI Phil Mathews, I picked up my bag of equipment ready to start the course and booked flying slots for the next few months. I booked 3 lessons a week in 4 hour slots which gave me flexibility depending on what the weather was like and also the option to book more if needed. With the theory exams I set myself a goal of completing at least 3 each month and as soon as I had completed my A levels I was straight into reading the flying books.

I completed the exams in 3 stages taking 3 in the first month, 4 in the second and 2 in the final weeks, I passed them all first time and also completed the radio telephony license test.

I started flying on the 19th June after a 2 year gap of not doing any powered flying.

After a few hours of training and getting back used to it I re soloed. This time the aircraft I was flying was different to what I had flown before. My course was primarily flown in the Robin R200 with a few flights in the Robin DR400 which I had flown before, there are some differences between the two aircraft. My instructors were Phil Mathews and Pete Dunkley.

After going solo again I did some more dual flying in the local area before then flying solo away, but near to the airfield. After that it was onto cross country and navigation which I had done many times in a glider before with a navigation device and chart, I soon learnt for powered it was quite different. This took careful chart planning which I soon learnt to be a real help in the air and the first cross country showed me this with heading error corrections. After a couple of dual cross country flights and practises at diversions I did a dual land away to Sywell. This was great fun as it was somewhere I had never been before. On the flight I spoke to London Information, it was good practise. After The Sywell visit I flew my first solo Cross country navigation flight which was a small triangle that took about an hour. The following week I did a dual land away to Wycombe air park which involved a transit through Brize Norton class D airspace. This was an amazing experience as our route took us directly over the top of the airfield and you could see all the aircraft out on the ground. Also on the way back as we transited overhead again this time an A400M was taking off and disappeared up into the cloud. My next flight was again navigation practise and this time a practise at going into Oxford for a touch and go. I then went on to do some tail wheel practise in the Citabria and we went over to Shobdon and practised more navigation and a land away. We picked up the R200 which was having work done to it and I flew it back solo. I also did one other flight in the Citabria and we went to local airstrips to practise take offs and landings.

On the 29th July I completed my Qualifying Cross country and planned to land at Shobdon and Sywell. The flight went really well and was great fun. I went to Shobdon first and got the tower to sign the form before then heading off to Sywell. Again I got my form signed before having lunch and a drink in the café watching other aircraft before heading back home to Gloucester.

After this I did another dual land away, this time to Dunkseswell. This route was interesting as it meant getting clearance through Bristol and took us directly overhead the airfield where at the time an Easy jet was taking off. It was also a great experience being on the same frequency as airliners and hearing the radio calls. Finally I completed my solo hours with a land away at Halfpenny Green. After this the rest of my flights were in preparation for the skills

test which was booked ready for 18th September.

Then the big day finally came, I had done a lot of preparation in the days leading up to it to be ready. I was nervous when I got there, I was nice and early to be prepared and ready. I went and refuelled the plane and waited for the examiner to arrive. At 10 Max the examiner arrived and we went into the briefing room to talk about the flight and what he was looking for. We then booked out checked over the plane and we were off. We started on the first leg of the flight to Banbury with a small heading correction needed which put us overhead Banbury perfectly. Then onto Bridgnorth which was all okay, we tuned into Birmingham listening squawk. Part way down this leg my examiner told me to divert to Bromyard and after this the navigation part of the test was complete. We then went on to do stalls, steep turns, practise engine failures and after this returned to Gloucester for circuits. We did a normal approach, flapless, glide and short field landing and after this the test was over. After we taxied back in and shut down the engine he told me I had passed and I was super happy.

I now hope to keep building hours at Cotswold Aero Club and to finish tail wheel training so I can go on to do a glider tugging course so that I can tow gliders at my gliding club. This will help me build hours which I will need if I want to complete my ATPL and go into a career as a commercial pilot. The Scholarship has been a great step forward in my flying progression and potential career prospects in the RAF or becoming a commercial pilot.

Finally, a massive thank you to my Instructors Phil and Pete for the great training and the Cotswold Aero Club for their warm and friendly environment. Also the Honourable Company of Air Pilots and to the family of Squadron Leader Brian Letchford for this Scholarship as without it I would not have been able to complete my PPL.

THE CADOGAN SCHOLARSHIP

JOHN HAILE



Becoming a pilot has always been my dream. I joined the Air Cadets (444 Sqn) at thirteen, enabling me to gain a 12 hour RAFA Scholarship, sponsored by the Aviation Focus Group. This

reconfirmed my ambition of becoming a pilot and truly gave me a taste of what my life could be like. And so I started to research into PPL scholarships and came across the Air Pilots. I was awarded the Cadogan PPL Scholarship this year. Thank you to both the Air Pilots and the Cadogan Trust for this invaluable scholarship which has been pivotal in aiding my journey to become an Airline Pilot and provided an amazing summer of flying.

After the interview, I spent a few days constantly checking

my emails, eager to see whether I was successful or not; it was just after my maths lesson finished that I found out that I was successful! I chose Stapleford Flight Centre as I had heard a lot of positive comments from my previous instructor, and as it is straight forward to get to from where I live.

Friday July 12th was my first flying lesson, filled with excitement I met the welcoming reception staff members and my flying instructor. He and I did a quick summary of the pre-flight checks, and, as I was familiar with the procedures, started getting on with the syllabus.

Immediately after take-off from Runway 21 at Stapleford we could see the skyscrapers of London nearby which was such a breath-taking view, and completely different when seen from the sky compared to the view while walking in the city. The general flight training area for students at Stapleford is over a local reservoir, a medium-sized body of water which is easily distinguishable in the surrounding area seen from above. Unfortunately, there were quite a lot of cancelled flight lessons due to the bad weather, but during these days I would study for the theory exams, review the next lessons plan, and recap all past lessons. Having sat 4 of my written exams during my previous scholarship, I had the advantage of having more time to focus on revising my actual lessons in depth.

Once we had accomplished the general handling and emergency procedures phase, we moved onto circuits to work towards soloing again. During this, we went through many different approach and landing techniques. Next step of the course was navigation, this was hard at first especially learning the flight planning, but it was the most fun and exciting part in the end.

Flying over new places and co-ordinating what you can see outside to your map is a really strange and surprising feeling. Fortunately, we had the best weather during this part of the course which made my experience even better with clear and beautiful views. A small part of the course involves basic instrument flying where I wore goggles to limit my view to just the instruments inside the aircraft, in order to simulate what it would be like if I had entered a dense cloud. Once I had completed this interesting phase I felt much more confident and aware. Some places we flew over were Southend Airport, Southend Pier, a bridge crossing the river Thames with London City close by on our right, and Hastings. All these places built up to my cross-country solo navigation which saw me fly to Lydd, Earls Colne and back to Stapleford.

On the day of this flight I had marginal visibility in the morning but it soon cleared to be a perfect day. My favourite part of the flight was during a zone transit overhead Southend Airport when an airliner took off from the runway beneath me. At this point I had emergency drills as second nature due to my instructor, Terence, frequently pulling the throttle back to simulate an engine failure during our lessons in order to always keep me ready for emergencies. After the cross country solo, Terence helped me to prepare for the final skills test. We revised the whole syllabus and practised a quick mock exam to

make sure I was ready to carry on with my skills test.

And finally, the skills test. The day before, I met with Alan the examiner. We had a briefing where Alan explained our planned route and the layout of the exam. The next morning, I arrived early and met with my instructor who gave me some quick last-minute tips. Once ready my examiner and I took off and flew for 2 hours and 15 minutes. As soon as we landed back at Stapleford, Alan said I had passed the skills test. My mum was waiting eagerly at the cafe to hear the result, we called my sister to tell her I passed and we celebrated together straight after. This was the moment we had been waiting for all summer and thanks be to God that this moment was finally here.

My last day of the scholarship was a few days afterwards when I had all the paperwork ready, Alan helped me fill in

all the forms and sent off the application for my licence.

Two weeks later, it arrived. An amazing summer of flying training at Stapleford Flight Centre. The staff members there were very helpful and supportive in accommodating my needs to reach the scholarship completion deadline. Terence had been a great instructor from whom I have learned a lot.

I encourage any person interested in becoming a pilot to apply for this and any scholarship that they can. It has given me a great experience and brought me a massive step closer to my dream. Thank you again to all the people that have been involved from the start to the end of my course.

BOOK REVIEW

RAF COLLEGE CRANWELL A Centenary Celebration

Roger Annett Pen and Sword, 2019



Reviewed by Liveryman Gp Capt (ret'd) Tom Eeles
(83 Entry, Cranwell, 1960 – 1963)

As an alumni of the RAF College, Cranwell, I looked forward to reading this book with considerable anticipation, especially as the author contacted me for information whilst researching his subject matter. Having now had the opportunity to review the book I find it to be somewhat akin to the proverbial Curate's Egg - good in parts.

Roger Annett was a member of No 81 Entry that arrived at Cranwell in September 1959. This Entry was the first to embark on a newly devised syllabus at the College, which involved selected Entry members studying for external degrees in addition to undergoing the service related officer training, which included flying training to 'Wings' standard on the newly introduced Jet Provost trainer. The thinking behind this policy was that the RAF needed to attract high quality potential career officers by offering the chance of getting a degree from their time in training in the same way as a university. The cadets now spent three long years at Cranwell, a considerably longer time in training than their direct entry colleagues would spend. There was no formal flying training until the start of the second year, just air experience in the Chipmunk.

The author has chosen to describe his Entry's experience of their three years at Cranwell in forensically minute detail. Given the passage of years, this must have taken a huge amount of research amongst the surviving Entry members. The first 306 pages of the book's 346 pages of text are dedicated specifically to 81 Entry's activities. He refers to his fellow Entry members only by their first or nick names so it is very difficult to work out who they are, even for me as a cadet only a year behind them, and impossible for anyone without inside knowledge. The

exception is the writer of the forward, Air Chief Marshal Sir Sandy Wilson, a former Entry member.

The narrative is all in the present tense, an unusual format for what is essentially a history book. Interspersed within the text are boxes with descriptions of other College related events and personalities, in italic script. The illustrations are all black and white and include reproductions of commercial advertisements from the 1960s ranging from Hunting Percival's Jet Provost advertisement to Bates the hatter and Poulson and Scone, the shoemaker, both suppliers to the RAF College cadets. It is a pity that no colour has been used as there are many colour photos available of that period. Whilst the author's descriptions of the minutiae of 81 Entry's cadet life in the early 1960s might interest some researchers I feel it does not do justice to the broader sweep of the one hundred years of the College's existence and the many changes that have occurred to the way it does its business. The last forty six pages cover the many changes to the training conducted at Cranwell that have taken place following the realisation that a three year degree course combined with officer and flying training was a step too far, thus heralding the end of the traditional Cranwell Flight Cadet. The book concludes with a description of what the College does today, along with a typical current graduation ceremony, witnessed by one of those members of 81 Entry who keep appearing. Today, all those recruited into the RAF, commissioned or non-commissioned, undertake their initial training at the RAF College.

A Centenary Celebration ? In my view, not really, more a description of College life in extreme detail over a relatively short time – 1959 to 1962 – with an updating to the present day. There are one or two errors of fact, the Q code for a controlled descent through cloud based on transmitted DF bearings was a QGH, not a QDH; 89 Entry, who arrived in September 1963 on the three year course could not have graduated in 1964. The text is clear and easily readable, the illustrations a bit disappointing and the book's main appeal may be to those surviving members of 81 Entry, providing they are not put off by the relatively high RRP of £30.

THE DUKE OF EDINBURGH'S AWARD SCHEME

By Liveryman Zoe Gell

The Duke of Edinburgh's Award Scheme (DofE) was first launched as a pilot scheme in February 1956. The programme has expanded rapidly and is now the world's leading youth achievement award. In its current format, young people take part in Bronze, Silver and Gold awards, comprising four sections: Volunteering, Physical, Skills and Expedition, with an additional Residential section at Gold level. The scheme is open to young people between the ages of 14 to 24, regardless of ability, gender, background or disability. Participants choose their own activities for each of the sections, allowing youngsters to choose activities they enjoy and care deeply about. The scheme allows youngsters to gain essential skills and attributes for the future such as problem-solving, teamwork, leadership and commitment, as well as developing self-esteem, confidence and resilience. Most of all, youngsters make friends, have fun and enjoy experiences and achievements they often never thought possible. Further information about the DofE programme is available via the website www.dofe.org.

LIVERY SCHOOLS LINK FUNDING

Every year since 2000, money has been raised by the Livery Companies Golf Day (the Ray Jeffs Cup), and donated to the DofE Award Scheme. This money is used to set up DofE programmes in London schools whose financial resources would be too limited to take part. Funds are used to purchase expedition equipment, provide training for teachers and allow pupils to take part where financial constraints would otherwise prevent their participation. This Livery Schools Link (LSL) funding was set up by Liveryman John Mason, who very sadly died in 2018. It is a fitting legacy to him that, via LSL funding, 49 schools have been able to offer DofE to their students, and over 80% of those schools continue to run a successful programme. Given the difficult circumstances which many of these schools face, including serving pupils from disadvantaged backgrounds and who are often in receipt of free school meals vouchers, as well as students with Special Educational Needs and Disabilities and students for whom English is not their first language, it is a remarkable achievement that they continue to offer DofE to their students year after year. Last year alone, 1474 young people started their DofE award in schools who would not be offering the programme without the initial funding assistance of the Livery Schools Link.

Three schools each year are selected by the DofE Operations Officer for London to receive funding, normally £1200 each. These schools are selected on the basis that they are the most deserving of funding, while being

deemed able to run a successful programme supported by their local DofE Operations Officer. Schools usually start by offering a Bronze Award to year 9 pupils, expanding their programme in later years to offer Silver and Gold Awards to their students. Once the schools have been selected to receive funding, members of the Air Pilots LSL team (Assistant Dacre Watson, Assistant Rick Thomas and Liveryman Zoë Gell) are invited to present the cheque to the school and speak to the students. The DofE Livery Schools Link Annual Report for 2018/2019 is enclosed with this issue of Air Pilot - it makes fascinating reading. The DofE funding is a little known activity within our Company, but one which has made an enormous impact on London schools over the past two decades.

SCHOOLS PRESENTATIONS

Liveryman Zoë Gell visited St Mary Magdalene Church of England School in Greenwich on 9th October 2019. Cheque presentations normally take place soon after the school has been awarded funding; however, due to flying roster-related difficulties in arranging a date to visit the school, it was decided to transfer the funds to allow the school to proceed with their DofE scheme and the cheque presentation was deferred to a later date. This presentation was then unusual in that the first group of students had already completed their Bronze award and the school was already looking forward to starting a Silver award programme. The students were very excited about the programme and rightly proud of their achievements. It was a pleasure to listen to the stories from their expeditions as well as see how the students had benefited from the various other activities which they had completed during the year. One young student who suffered from epilepsy had raised over £1000 for the Epilepsy Society and has become an ambassador for the charity. A remarkable story and a superb example of how participation in the scheme can have such a positive impact on young people's lives.

There are two outstanding presentations for the 2019 year: St Ignatius College, Enfield and Ealing Fields High

Liveryman Zoë Gell presents LSL funding to St Mary Magdalene School





Willowfield School – students on the expedition phase

School, Ealing. Dates are being arranged and a member of the Air Pilots LSL team will visit these schools shortly.

Willowfield School was awarded funding in 2018. Their story is included in the DofE LSL Annual Report and the school held their awards evening recently. It is hoped that they will be able to take part in the Air Pilots Schools Gliding Scheme during 2020 – a scheme which they learned of via Dacre during their presentation. The school wrote to Zoë recently with photos from their expedition; the students certainly appear to have enjoyed their experiences!

RAY JEFFS CUP AND RAFFLE

As described above, the Ray Jeffs Cup is an 18-hole Charity Golf Day, organised by the Air Pilots to raise funds for Duke of Edinburgh's Award London. Over the years this event, held at Hartley Wintney Golf Club, has established itself as a very enjoyable and sociable competition for Livery Companies, as well as a successful charity event. In its first 19 years over £64,000 has been raised, helping over 40 schools in the Greater London Area to set up or fund their schemes. The 2018 event, despite being slightly down in team numbers, raised just over £3,000. A team of Air Pilots won the trophy in 2019.

When this competition was established it was envisaged that, as a charity event, players would be prepared to pay for their golf which they happily do. Whilst over the years support for this and other similar events has declined, we are still able to make a valuable contribution to DofE. Several livery companies are staunch supporters and always make every effort to enter two teams, whilst some companies also make a generous donation to the cause

in addition to the team costs. We also receive generous donations from companies, even though they haven't been able to enter a team in the event. This all helps our fundraising.

One of the most significant contributions to the funds raised is the raffle we hold each year. In the last few years we have raised about £1,000 each year from the raffle alone. When you consider that the total number of players was only sixty-eight this year, you will realise what a good job the raffle ticket sellers do to help the cause.

We are very grateful to all those who support the cause by donating prizes. We usually manage to beg a few vouchers for golf days and other prizes. The rest, we purchase. Individual players are also occasionally generous enough to bring their own contribution. (Some excellent wines this year).

Could we please ask that you support this event in any way that you can to enable us to continue raising funds for the very worthwhile cause? If you could donate a suitable raffle prize, offer a visit to a place of interest or anything else you think would be an attractive raffle prize could you please get in touch with Liveryman Rick Thomas (rickthomas@omega-training.co.uk). Your help would be much appreciated.

As a company we do sometimes struggle to raise two teams in support of our own Charity Day which is disappointing. We would welcome and encourage any member of the company who is a golfer to enter. If you enter as an individual, we will happily create a team or better still, enter with others (members or friends) to make a team of four. It is a very relaxed and enjoyable day for golfers of all abilities. The 2020 event will be on Thursday 30th July and you will be most welcome for golf and lunch. I hope we will be able to welcome as many of you as possible to the 2020 event.



The Duke of Edinburgh's Award —

The DofE & the Livery Schools Link



Matthew Barnett
Operations
Manager
The DofE London

Foreword

On behalf of the Charity, we would like to extend our thanks and gratitude to everyone involved with the Livery Schools Link for their commitment supporting The Duke of Edinburgh's Award for young people in London.

Since it was first launched by John Mason of The Honourable Company of Air Pilots almost 20 years ago, the Livery Schools Link has supported the introduction of the DofE to schools across the whole of London. John sadly passed away last year, but leaves behind a legacy of thousands of young people across the capital who have had the opportunity to start their life-changing DofE Award thanks to funding from the Livery Schools Link.

We would also like to express our sincere gratitude to Dacre Watson, Zoe Gell and Rick Thomas for their continued support; attending cheque presentations and inspiring students with their personal experiences to promote the benefits and impact of the DofE.

They have all spoken of the DofE with eloquence and passion, highlighting the value of vital life skills gained through participation in the DofE Award, such as leadership and employability.

Your support demonstrates to these young people the value that is placed on achieving a Duke of Edinburgh's Award. Since 2000, almost 50 new schools have been able to offer the DofE Award to their pupils, as a direct result of the fundraising of the Livery Schools Link, and I am delighted to report that around 80% of these schools are currently still active with thriving programmes.

In particular, your support has been of benefit to DofE participants from disadvantaged backgrounds across London, who may otherwise have been unable to take part. Without the generosity of the Livery Schools Link, the vast majority of these schools would not have been in a position to establish an affordable or accessible programme.

Thank you. We truly value your support.



GLIDING WITH THE LIVERY SCHOOLS LINK

By Liveryman Zoë Gell

BACKGROUND

The Air Pilots Schools Gliding Scheme has been in operation since 2004 and each year offers students the opportunity to experience a visit to a local British Gliding Association (BGA) gliding club. Schools taking part in the scheme are partnered with a local gliding club and arrange a day trip for a group of their students as part of their extra-curricular programme of activities. This is often the highlight of the year for many students, as well as the teachers who often seem just as excited! The flight in the glider is, of course, the highlight of the day.

The youngsters take to the skies under the watchful eye of their instructors in a two-seat glider. Many of the students take control of the glider and learn how to fly themselves; often something they never thought they would do at the start of the day. The view alone transports the youngsters far, far away from their day-to-day lives: many of the students taking part are from deprived areas in London and the breath-taking view from a glider cockpit quite literally opens the door to a different world for them. But the day is about far more than just the flight itself. Immersed in the hustle and bustle of a busy, active airfield, the youngsters are surrounded by new experiences and people. The enthusiastic and hard-working instructors are volunteers for the scheme, taking part because they all share a love of gliding as well as a desire to give something back to the world of aviation. Interacting with the instructors and club staff, talking about flying and other careers and opportunities, moving the aircraft in and out of the hangar and everything else that comes with a day at a gliding centre is just as important as the actual flying and offers the youngsters a thoroughly enriching environment to explore.

The students grow in confidence throughout the day and leave the gliding centre buzzing with enthusiasm, as well as

having enhanced their generic life skills through their experiences and interactions. The scheme, which officially offers a 'subsidised flight in a glider', actually offers so much more beyond this, and as a result schools sign up year after year. The scheme has allowed almost 1500 students to experience flying so far and we hope to continue the scheme for many years to come.



CHARITABLE SUPPORT

The scheme is funded via charitable support from the Air Pilots Benevolent Fund, as well as funding from some other Livery Companies who support their affiliated schools. The scheme itself is managed by the Air Pilots, working closely with the gliding schools throughout the year. These gliding clubs share a similar commitment to supporting youngsters experiencing gliding, and also offer opportunities to those who may not otherwise have the means to take part. The gliding clubs offer a reduced rate for the scheme which is combined with the charitable support to reduce the charge per student to a small sum: £8 per student for 2019. A highlight of the year for many schools; a highlight of their lives for some students. A worthy cause indeed and thoroughly deserving of the valuable funding so gratefully received from the Air Pilots Benevolent Fund and the other Livery Companies.

2019

Last year, students from ten London schools took part in gliding days. Sadly, some bookings were cancelled as a few schools succumbed to the typical British summer; it is



hoped that these can rebook for summer 2020. The gliding days were held at the London Gliding Club at Dunstable, Booker Gliding Club at Wycombe Air Park, and Lasham Gliding Society at Lasham Airfield. Each of these gliding clubs are BGA Junior Gliding Centres, and are experienced with working with school groups, as well as other organisations such as the Duke of Edinburgh's Award Scheme and the Scouts. The feedback from the students was enormously positive, and the Air Pilots are immensely grateful to the gliding clubs for facilitating such a wonderful experience for the students.

2020

At the time of writing this article, plans are already well underway for gliding during 2020. Schools are invited to express an interest in gliding at the start of the academic year and fifteen schools signed up straightaway. Bookings are taken by the gliding clubs in January for gliding days during the summer. It is hoped that the scheme can be expanded outside London and options are currently being explored with other gliding clubs – an exciting prospect! Do you know a school who might like to take part in the scheme?

Many schools have joined the scheme after learning of its existence at Livery Schools Link DofE presentations or careers events such as the Guildhall Showcase where the Air Pilots have a stand. Often, word-of-mouth is the most effective way of publicising the opportunities available as, sadly, gliding is sometimes seen as a risky activity and dismissed as a suitable extra-curricular activity until the school learns more about what is involved. Schools which have taken part successfully over the years have had support from their headmaster/mistress and a well-organised 'lead teacher' who has run the day on behalf of the school. Traditionally, the scheme has been London-centric, so secondary schools and academies within the London area are welcome to apply. It is hoped that the scheme may expand into Cambridge and Derbyshire areas on a trial basis for 2020. If you know of a school who may be interested in taking part, either in London or in the Cambridge/Derby area, please contact the office in the first instance. We would be delighted to hear from them!



Feedback from schools from 2019...

"...all of our students thoroughly enjoyed their day Gliding. The staff at Booker were excellent and really looked after us for the day."

City of London Academy, Highgate Hill

Some quotes that the girls gave us at the time and also that we sent to Booker were:

"A once in a lifetime opportunity and something that I never thought I could do. I'm so happy I went to do it".

"This has given me an insight into a possible career that I never had thought about before."

"I am going to look into Air Cadets as a result of this opportunity. It has ignited a passion I never knew I had."

"I was nervous at first but the pilot with me was so calming and I even took control for a while. I'm amazed at myself!"

"Just a quick note to say a massive thank you for last week's gliding. The instructors we had, Mike and Peter were absolutely first class in how they communicated with the pupils. We all had a fantastic day and if possible we'd love to bring another group back next year."

Morpeth School

"We had a super time, your instructors were all wonderful, patient and interesting and they made it a day to remember for all the children. It is an experience they would never have had if it not for the generosity of the Air Pilots. One of our students already had a passion for planes. He bought the gliding manual and I have a feeling you may see him again! Thank you from all of us at George Green's School."

George Greens School

"It was SUCH A GOOD DAY!!"

Eastbury Community School

See You Tube video at: <https://youtu.be/dd-ONXegVUI>



AVIATION MUSEUMS IN THE UNITED STATES

By Freeman Vic Flintham

The tour train stopped momentarily and in the stifling heat of the Arizona desert the portly driver, of advancing years stood, microphone in hand: "This, ladies and gentleman, is my favorite airplane, the F-105 Thunderchief. I flew one of these for three years in Vietnam, knocking out radars so the other guys could get in undetected." Gentle applause followed. He had stopped in front of a finely restored two-seat Wild Weasel F model, sitting next to an equally smart single-seat D variant. He moved smartly on along the row of iconic fighters – Sabre, Super Sabre, Delta Dagger, Delta Dart, Thunderjet, Thunderstreak, Scorpion, Starfire, Shooting Star, Starfighter, Voodoo, Phantom. Beyond those were naval fighters of the same period, then bombers and so on as far as the eye could see. This was Pima Air and Space Museum, an air historian's paradise!

Over the years I have managed to get to many fine aviation museums. While it is wonderful to see vintage aircraft in their natural environment – the air – there is an inevitability, if for no other reason than cost, that many important examples of historic aircraft will remain on the ground in protective custody. With a small group of flying pals I've flown around Europe checking out museums adjacent to destinations, and on visits to the US, on behalf of the now defunct e-Go Aeroplanes, managed to fit in a

number of major museums in North America. In recent years though, our flying plans have been disrupted by poor weather (IMCR rather than full instrument ratings!) so we have taken to driving or being flown. This year we decided on museums in Arizona and California.

The main objective was Pima Air and Space Museum, and the adjacent 'boneyard' at Davis-Monthan AFB managed by the 309th Aerospace Maintenance and Regeneration Group. We also planned to visit Planes of Fame at Chino and the nearby Yanks Museum. Travel was by BA 747 to Phoenix, hire car to Tucson for Pima then up to Williams to take in the Planes of Fame outpost at Valle, Grand Canyon, the Hoover Dam, Las Vegas in the hope that there might be action at Nellis AFB, then Chino and up to San Francisco for the return flight, this time on an A380.

Aviation museums in the United States never fail to amaze: even the smaller, remoter, institutions include unexpected delights. Having subscribed to Air Pictorial since 1949, I wondered then at the plethora of new aircraft appearing at a fast rate in the third quarter of the twentieth century, not only at home, but also in France and especially the US. Those at home could be seen at Farnborough each year, with some of the prototypes now accessible in museums.

Sikorsky S-43 Baby Clipper (Pima)



Lockheed Constellation, VC-121A Columbine (the personal aircraft of Gen Eisenhower before he became President of the US. (Pima)



In the States almost all of the post-war output has been preserved, but spread across this vast country.

Pima is one of the larger establishments with some 350 airframes, many of which live outside in the dry, hot, climate of southern Arizona. The number of one-off designs of mainly light and racing inter-war aircraft speaks volumes for American ingenuity and experimentation. Not all succeeded and not all were pretty – witness the lethal GeeBee racers, flying beer cans, all bar one of which crashed and replicas of which are in several museums. Typically, Pima includes a number of ground-breaking civil aircraft, but these were not my main interest. I went on this trip with several broad ambitions. One was to see postwar prototypes including the Northrop N9M-B flying wing, regularly flown by Planes of Fame. Tragically David Vopat, its pilot was killed flying the aircraft in April. The other aspiration was to explore the American combat aircraft of the 1950s and '60s, some of which had appeared in the UK when operational, but many of which did not.

In 1962 the Department of Defense introduced a common designation system for aircraft of all services. While the USAF system had some obvious logic, the Navy system, based around manufacturer's code letters, was at best opaque. Many readers will be familiar with the Century-series fighters, noted earlier – F-100 Super Sabre, F-101 Voodoo, F-102 Delta Dagger, F-104, F-105, F-106 and so on. Of the missing numbers, the F-107 was a modified F-100 with intake above the fuselage. Three were built, flying briefly in 1956, and two survive, one at Pima. And the F-110? In the new system it became the F-4 Phantom, examples of which now sit in just about every major aviation museum in the world.

One of the joys of seeing these Cold War veterans was to take in the wide range of colourful, if not flamboyant, markings, and this particularly applied to the naval aircraft. All this was in stark contrast to the drab grey of the A-10s, F-16s and C-130s flying out of nearby Davis-Monthan AFB. Apart from the very large number of post-war military aircraft highlights for me included the pre-war Sikorsky S43 amphibian, marked up as a Marine Corps aircraft, the curvaceous Constellation, of which there are not just one but three examples, and the Grumman Guardian fire-fighter.

By contrast with the overly pristine and slightly surreal finishes of aircraft at the USAF Museum at Dayton and the

McDonnell F-3B Demon operated by VF-13 (Pima)



LC-130F Hercules (Davis-Monthan)



C-5 Galaxy transports are visible with T-34 Mentor trainers in the foreground. (Davis-Monthan)



F-100 Super Sabre's evolution - the F-107 (Pima)

National Air and Space Museum, Washington, the Pima aircraft appear more natural, despite those outside having their cockpits sprayed to prevent deterioration. Further, where the NASM is unashamedly US-centric (but there is an Air France Concorde and a Whittle engine!), Pima gives credit where it is due. The line-up of no fewer than six Harrier variants (XV-6A Kestrel, AV-8C, TAV-8A, GR.3, GR.5 and Sea Harrier F/A.2) are all credited to Hawker-Siddeley or British Aerospace, despite the original MDAP funding for P.1127 development and the later McDonnell Douglas involvement.

AV-8C Harrier (Pima)





F/A-18A (in aggressor colours). (Davis-Monthan)



F-16C (Davis-Monthan)



USMC AH-1W attack helicopter in the process of being wrapped. (Davis-Monthan)



Grumman F3F-2 'Flying Barrel' replica (Planes of Fame)



Messerschmitt Bf 109G-10 (Planes of Fame)

After Pima, the following day saw a return to take the coach tour of the boneyard. This has hosted up to 8,000 airframes, but at the time of our visit there were just under 4,000 including 350 C-130s. Visits have to be booked well in advance and require passport identification on the day. The tour lasts about one and a half hours and there is no stopping and while photography is allowed, images incorporate the dirt and reflections of the coach windows!

Rather like the Grand Canyon, nothing quite prepares one for the sheer scale of the enterprise: the undertaking is simply vast. Aircraft brought here - on the day of our visit they included 35-year old F-16s and FA-18s - are first drained of fuel, oil and hydraulic fluids and then sealed against the ingress of water and dust and with cockpits covered. The aircraft sit in this aeronautical retirement home awaiting one of three outcomes. Some will be resuscitated either for further US use (like two recent B-52H models) or for sale to an approved foreign air force; others will slowly become cannibalised as aeroplane organ donors; in due course most will go out to the Tucson scrapyards to be parted or prepared for sale privately or for museums.

The AMARG retirement home is no respecter of status. Dotted around are aircraft displaying special commemorative markings or the insignia of superior institutions, like the U.S. Naval Test Pilot School P-3 Orion. The wide range of tail codes is a reminder of the geographical sweep of the USAF and the scale of the USN's carrier force before the Peace Dividend reductions.

There is a long avenue of the boneyard's own 'museum' aircraft with some rarities. These include the sole Fairchild T-46 trainer (think Miles Student), cancellation of which led to the folding of Fairchild; an EB-57B Canberra of the Vermont Air National Guard used to test radars against electronic warfare; and a USN TA-4F Aggressor aircraft probably from the USN Fighter Weapons School. Lurking in the background was a sad-looking engineless RB-57F high altitude reconnaissance machine, its huge wings resting on trestles.

From Tucson it was on to Chino via the Planes of Fame subsidiary museum at Valle. Out front were two superficially similar airliners of the 1950s - the Convair CV-240 and Martin 4-0-4 - and one of many F11F-1 Tigers across the US painted up as an aircraft of the USN Blue Angels display team. Inside, the rarities included a Bf-109G-10 war prize, and a single-seat Mooney M-18C of which some 283 were built. Did any come across to our side of the Atlantic, I wonder? Outside, in very poor condition is an ex-RCAF Vampire F.3, the forward (wooden) fuselage of which is de-laminating.

After sight-seeing at Grand Canyon - curtailed after some fairly dramatic CB cells closed viewing areas for fear of lightning strikes - it was on to Chino via Las Vegas (which is this writer's vision of hell)!

Planes of Fame is like a slightly smaller version of the IWM at Duxford, but unlike Duxford it is an entity. The enterprise tries to keep as many historic aircraft as possible flying, and has a steady programme of restoration. At the time of our visit one of the most exciting prospects was

the restoration to flying status of a Bell YP-59A Airacomet, the first jet aircraft to be built in the US, powered by two General Electric turbojets based on the Whittle engine. Rebuilding the engines is proving to be a very particular challenge. On static display is an example of the P-80 Shooting Star which was the first American combat jet, this time powered by a British Halford H.B turbojet: little-known is that two examples briefly flew demonstration sorties in Italy in early 1945.

Among the two dozen or so aircraft in flying order is a stunning Boeing P-26A 'Peashooter' fighter of 1934, and an original Mitsubishi A6M5 Zeke or 'Zero'. The collection incorporates a number of war prizes, some very rare, and including a Horten H.IV flying wing glider, and Mitsubishi J8M1 Shusui (Sword Stroke) rocket fighter. This latter was effectively a copy of the Me 163 and although several were built only one flew – and crashed – before the end of the War.

Finally, it was swiftly next door to the Yanks Museum, about to shut as I arrived. This museum has a good collection of aircraft including the usual run of pre-war civil, WW2 combat aircraft and post-war jets. The former included a fine Travel Air 6000-A built by the company led by Messrs Beech, Cessna and Stearman before they strode their separate roads. Among the wartime machines was the rare Curtiss Model 85 O-52 Owl, roughly the equivalent of the RAF's Lysander, while perhaps the most remarkable of the post-war military aircraft was the FJ-1 Fury, the first USN jet fighter which equipped just one squadron. I was delighted to see what I thought was an A-36 Invader dive-bomber version of the P-51, photos of which I needed for a forthcoming book: in the event it turned out to be a P-51A Mustang!

Unfortunately, because of my late start, I could not see the larger aircraft outside, but adjacent to the museum is what I took to be a scrapyard but which appears to be the storage area! Although most remains appear to be beyond redemption, it does seem that the museum is able to convert them to very presentable display condition at quite a rate.

Given the time there were other museums that we could have visited, for example in San Diego, but that might just have resulted in aviation indigestion. Now it is simply a matter of sorting the 3,500 or so images and filing them away for future reference. (For photography I used a Nikon 850 with a fast 24-70mm lens which is ideal for inside filming in cramped conditions.) I also need to ponder a few questions, like why so many US museums have examples of the Spanish Hispano Saeta, and the basis for the unusual colour schemes on the several Gnats on display.

I can recommend the museums we did visit as being lively places with many interesting and indeed unique airframes, with knowledgeable staff and volunteers, and without the slightly sterile feel of the major collections. Having said that I would happily see our Science Museum's full collection rly displayed and accessible.



Boeing P-26 'Peashooter' (Planes of Fame)



Bell YP-59A Airacomet under restoration to flying condition. (Planes of Fame)



Mitsubishi J8M1 Shusui (Autumn Water) (Planes of Fame)



Gee Bee R-2 Super Sportster (Fantasy of Flight).



Curtiss O-52 Owl (Yanks Air Museum)



Grumman F11F Tiger (Yanks Air Museum)

THE VINTAGE AIRCRAFT FLYPAST OF 20 OCTOBER 2019

By Liveryman Robert Moore

As Chairman of the SA Working Group of The Honourable Company of Air Pilots Australia, I emailed the History Trust of South Australia to indicate our interest in participating on the Epic Flight Centenary Committee when it was being formed some months ago.

We were accepted so I emailed our 70 Adelaide members for suggestions for commemorative events. Surprised at the lack of actual flying events, Upper Freeman Captain Darryl Hill suggested a flypast of vintage aircraft. Having ducked when he should've weaved, he subsequently became the Display Organiser for the event.

I had met Rob Manton, Director of Veterans SA, at my first EFC2019 meeting, and Darryl and I met with him to discuss funding. During that meeting Rob requested assistance for the Centenary of Armistice Day last year and Darryl suggested a poppy drop over the National War Memorial on North Terrace. That proposal was enthusiastically received, and planning for that event went ahead to a successful conclusion on the 11 November 2018.

The 2019 event was to be a fly past over sites of significance to the Vickers Vimy. This was inspired by the arrival of the Vimy in Adelaide in 1920 when it was met by a contingent of local machines. The commemorative flypast would be a formation of vintage aircraft including a DH84a Dragon representing the Vimy.

This operation was successfully flown on the 20th of October when the formation overflew the Vimy Memorial at Adelaide Airport.

Raising sponsorship to cover operating costs for the event was a difficult task that fell to me and the Epic Flight Committee. The larger companies we approached may not have seen adequate sponsorship value, or perhaps were risk averse to this type of event, so had it not been for a grant from the History Trust and donations from the RAeS Australian Division, the Honourable Company of Air Pilots Australia, and Shell Aviation, the fly past may not have proceeded. We also received three small private donations.

In addition to my job of reporting to the EFC 2019, I organised the ground support at Aldinga for the post-flypast public event as well as providing a commentary and promotional crew at the Vimy Memorial site. Darryl Hill had the more difficult role of gathering aircraft and pilots and negotiating with the aviation authorities.

The first thought was to have a replica Bristol Fighter lead the flypast. There is one in the colors of Ross Smith's 1 Sqn AFC machine currently operated by the TAVAS Aviation Museum in Caboolture. Early enquiries revealed some operational issues, as well as difficulty and much expense positioning the machine to Adelaide (dismantling and road transport before re-assembly, test-flying, operating and then repeating the process to get it home again). Darryl even looked into purchasing an incomplete replica that was for sale in NZ and rebuilding it in a 1 Sqn scheme, but this was impossible given the time, not to mention expense.

Secondly the Dragon (VH-AON) had been undergoing a rebuild since it left Airworld at Wangaratta in 2003. The owner, Harvey McBain, is a devotee of 1920s aviation and was an immediate 'yes' when asked to participate. Despite 12 months' notice, AON did not fly until about 10 days prior to the flypast, indicating the magnitude of the task.

Organisers and crew at Aldinga (Gary Petts)



DH-84 Dragon VH-AON (Gary Petts)





Five of the fleet at Aldinga (Gary Petts)

faced by the engineers at the Nelson Aeroplane Company. Test-flying of the Dragon also looked problematic, as Harvey had zero hours on type. A legend in De Havilland circles, Henry Labouchère volunteered to travel from the UK, test-fly the machine and do the requisite display flying while converting Harvey to type. Sadly this did not happen, entirely due to bungling and bureaucratic paper-shuffling at CASA Licensing and Registration Centre when Henry attempted to renew his Australian licence. To his credit, Harvey took on the task and has quickly developed into an accomplished Dragon pilot.

Our original intention was to support the Dragon with a bevy of local biplanes. Unfortunately one was u/s, rebuild of another had been prolonged, and a number of local pilots declined to participate due to work commitments. The latter was especially frustrating as it was often at late notice and required rapid re-planning and submission of new (or revised) reams of paper to CASA.

The organisational workload was increased when Peter McSherry of South Coast Helicopters offered his R44 helicopter with a stabilised High-Def camera as a camera-ship. This was gratefully accepted and some rough-cut footage is available on YouTube at

<https://www.youtube.com/watch?v=hnlIV3YI4Qo>.

The original plan was to fly roughly down the Adelaide Airport runway 23 approach path, overfly the Northfield Vimy landing site, the North Road Cemetery (burial site of the Smith Brothers), a dip of the wing as we passed North Adelaide (birthplace of Keith Smith) and an overflight of the Vimy Memorial at Adelaide Airport.

The date for the flight was arranged to coincide with the Adelaide Airport Open Day, held to celebrate the Vimy Centenary. Adelaide Airport Limited asked that the formation land at Adelaide after the flypast and participate statically in their Open Day activities, but there were a number of operational problems with this involvement. We eventually decided that a better option was to continue outbound, overfly Wally Shiers' grave at Centennial Park and land at Aldinga where we could allow the public much closer access to the aircraft.

A formation practice was held at Clare Valley Aerodrome the weekend prior to the flypast, coinciding with the Antique Aeroplane Association Spring Fly-In.

Negotiations with Airservices Australia were the most problematic element of the exercise.

ASA's total focus is on supporting commercial operations, presumably since this is where their funding is primarily sourced. In fact the first question asked when querying our lack of approval was "have you discussed this with the airlines...?" Well, no because we aren't doing this with a formation of passenger-packed 737's.....

Controllers of old were usually light aircraft pilots themselves. This is now rarely the case, and usually with only 2-3 years' experience, trying to explain the vagaries of old aircraft without modern aids to them is a bit like talking in a foreign language.

The final line-up for the event was:

Vimy 1	Harvey McBain & Darryl Hill (SAAM FOM)	Dragon VH-AON
2	Johnson & Steve Nelson (SAAM Member	Tiger Moth VH-ABL
3	Tim Brownridge	Tiger Moth VH-CDM
4	Marc Michel	Chipmunk VH-RTW
5	Jim Whalley (SAAM Patron)	Chipmunk VH-DHU
6	Peter McSherry & Liam Vonic -Joyce (Camera Op)	R44 VH-HAI

The focus on RPT (scheduled flights) tends to compromise GA (general aviation) activity in Adelaide airspace, as does the relocation of Adelaide Approach control to Melbourne where it does its job remotely by radar. This raises a number of issues; firstly any VFR (Visual Flight Rules) traffic near the runway 23 Instrument Landing System blocks that primary instrument arrival. Traffic at 70 knots would block the approach for around 13 minutes. Applying IFR (Instrument Flight Rules) separation standards (effectively a 3nm circle around each aircraft in the Control Traffic Region) further limits what can and cannot be done via radar within the Control Zone and complicates the controller's task unless the traffic can be transferred to Tower where more flexible visual separation standards can be applied.

This had already caused us some grief the year before during the Remembrance Day Flypast when the turf war between Tower and Approach left us on the latter frequency and subject to their separation standards. Some spirited R/T became necessary to achieve our Time On Target.

Darryl was advised after the CASA documentation had been submitted that the proposed flight path would not be acceptable to Airservices Australia, and so he quickly met with Gerard Mears at Adelaide Tower. A ten-minute face-to-face discussion over a map sorted out an alternative plan, reinforcing the viability of this form of contact. The revised plan had to delete the Northfield site, but picked up Semaphore (birthplace of Ross Smith), overflight of Harry Butler's airfield Albert Park site and enabled an orbit around SAAM at Port Adelaide. I'm not sure how many members saw that, as most of them were at the Aldinga Aero Club and the Vimy Memorial!

The knock-on effect of the revised track overhead the Vimy Memorial was to require an amended approval from CASA. An amended submission was forwarded and despite the original FOI going on leave and his successor being on sick-leave for a couple of days, the revised approval was received two days before the flypast.

The actual operation went without a hitch, mainly due to close co-ordination between the Display Organiser leading in the Dragon and the duty Tower Controller Patrick Normoyle.

Thanks to Darryl's Planning and persistence I hope the sponsors would be pleased with the event being aired on National TV evening news that night and the publicity they received on the ground at both the Vimy Open day and at the Aldinga site, Aldinga Aero Club, where the public were able to view the aircraft and talk to the pilots and crews if they wished.

Sponsors



The Flypast over the Vimy Memorial (Mike Milln)



THE ACTUAL ROUTE FLOWN WAS...

Aldinga ⇨ Port Noarlunga ⇨ Marino Light ⇨ Centennial Park (Wally Shiers) ⇨
 holding at Bunnings Edwardstown ⇨ IP ⇨ Vimy Hangar ⇨ Grange Jetty ⇨ Coastal to Semaphore ⇨
 Hold Semaphore / SAAM ⇨ Queen Elizabeth Hospital ⇨ North Road Cemetery ⇨
 Parklands (dip in salute to North Adelaide and Norwood, birthplaces of Keith Smith and Wally Shiers) ⇨
 Waite ⇨ Marino Light ⇨ Port Noarlunga ⇨ **Aldinga**