



AIR PILOT



INSIDE

2024 AGM

FLYING CLASSICS

SPOOFING & JAMMING



THE HONOURABLE COMPANY OF AIR PILOTS incorporating Air Navigators

PATRON:
His Majesty The King

MASTER:
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CLERK:
Paul J Tacon BA FCIS

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

PUBLISHED BY:
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The **final** copy date for the June 2024 issue is
Monday 29th April 2024

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PRINTED BY:
Printovation Ltd 01494 478870

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DIARY



Applications for Visits and Events

Details and application forms for Company events and visits are now available only online – either on the website or via links in the electronic newsletter and events bulletins.

APRIL 2024

11 th	GP&F	APH
14 th	APFC Freddie Stringer Lunch	White Waltham
21 st	APFC Start of Season Lunch	White Waltham
24 th	Luncheon Club	RAF Club
24 th	Cobham Lecture	RAF Club
30 th	APBF	APH

MAY 2024

8 th	Centenary Committee	APH
8 th	Company visit	London Air Ambulance
10 th	Company visit	Middle Wallop
15 th	APFC Fly-in	Old Warden
16 th	GP&F	APH
16 th	Court	Cutlers' Hall
23 rd	Livery Dinner	Drapers' Hall
30 th	Company visit	Keys Ceremony, Tower of London

JUNE 2024

19 th	GP&F	APH
30 th	Master's Garden Party	Brooklands Museum

Cover photos: Heritage Aircraft Ltd's Folland Gnat G-MOUR in Yellowjacks livery, flown by Liveryman Edwin Brenninkmeyer, formates with BAe Hawk as the Red Arrows unveils its 60th anniversary livery (Cpl Phil Dye, UK MoD, Crown Copyright 2024); The new Master, Richie Piper (Annabel Moeller)

Guidelines for submissions to Air Pilot

Please submit contributions as follows:

- Text in word document, including your name below the title of the piece;
- Photos as separate attachments, not embedded in emails;
- All images to be sent as jpeg files with a file size of at least 2MB;
- Attachments totalling more than 15MB to be sent via WeTransfer only.

A MESSAGE FROM YOUR EDITOR...



Sustainable Aviation Fuel (SAF) is increasingly being touted as part of the solution for decarbonising the aviation industry – but where are significant quantities of it going to come from? It's not just a case of ramping up production

by pumping more out of the ground, like crude oil. SAF comes from non-petroleum-based renewable feedstocks including food waste and woody biomass, and many of them are inherently in limited supply.

There is only so much food waste – and there is pressure around the world to reduce the amount of food that goes to waste. Woody biomass is a controversial resource: turning over current arable farmland to growing fuel feedstock compromises food production, but clearing new land for it – deforestation – is ecologically and politically unacceptable. There is continuing debate over whether biomass grown for cropping is truly green anyway - yes, it locks in carbon while it is growing, but unlike “permanent” vegetation, releases that carbon when consumed.

Hydrogen-based fuels may be more sustainable, apart from one important factor – the barriers to their economical mass production. As hydrogen doesn't exist naturally in a readily accessible free form it needs to be stripped from a naturally-existing compound – water - and that process needs a great deal of energy. Demand for that energy – essentially electricity - is increasing just when supply is threatened by shortages. The new nuclear power stations which should have been coming on line by the end of this decade will not only not be ready, but most not even in progress. Wind and solar are rapidly taking a greater share of the load, but cannot provide reliable, base-load generation (though they could be much better utilised to power hydrogen electrolysis instead of being switched off when supply exceeds demand). That is a threat not only to hydrogen, but also to the fleets of electric air taxis and small airliners which countless promoters are promising us.

The financial sector has shown itself very adept at funding the building of more efficient aircraft and engines – and getting them into the hands of operators – but so far there seems to be far less commitment to investment in SAF and hydrogen. Governments are generally either less willing or less able to invest in power generation than they once were, but can the private sector yet see the potential commercial returns to justify investing? Alternative fuels are vital to the future of aviation – and so is action to make them readily available.

Allan Winn - Editor

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ANNUAL GENERAL MEETING

The 2024 AGM of the Company took place at Merchant Taylors' Hall, following the annual church service at nearby St Michael's Cornhill. Following the AGM, at which the outgoing Master, Capt Jonathan Legat, and the Honorary Treasurer Ian Melia reported on another successful year for the Company, the installation took place of the new Court for the 2024-25 Session, with the now-established ritual of the IPM informing new Master Richie Piper: "You have control."



The Court processes to Merchant Taylors' Hall



This year's Wardens (L to R): The Beadle, Dave Singleton, Elizabeth Walkinshaw, IPM Jonathan Legat, The Master, Master-Elect John Denyer, Steve Dean, The Clerk



The 2024-25 Assistants (L to R): Andrew Bloom, Glen Ficker, Chris McGee, Pat Voigt, Sam Waller, Kat Hodge, DJ Gibbs, Pete Taylor, Eleanor Ivory, Chris Palmer, Ed Pooley, Seb Pooley (not present: Baz Dale, Steve Durrell, Mark Tousey)

2024 AGM - HONORARY TREASURER'S FINANCE REPORT



*By Liveryman Ian Melia,
Honorary Treasurer*

The Honourable Company's operating financial performance for the year ended 30th September 2023 was

marginally ahead of a breakeven Budget, which was a welcome achievement set against a challenging economic environment of continuing high inflation.

The operating surplus is markedly lower than the large surplus for the previous year which, at first glance, appears to be a worryingly serious reduction until one remembers that last year's results benefited from two generous one-off donations – an additional distribution from the Gladys Cobham Trust and a one-off legacy. Adjusting for these two exceptional items results in an operating surplus for 2022 of a more comparable figure (with this year) on a normalised or recurring basis.

Total recurring income in 2023 was 8% higher than the recurring income for the previous year because of an increase in the regular distributions from the Gladys Cobham Trust, additional income from functions and ceremonies and a modest increase in membership fees and quarterage. The increases in membership fee rates were either zero or considerably less than the general rate of inflation.

As for expenditure, the total operating costs were 9% higher than in 2022 mainly due to inflation, which was 7% higher over the year, and modest higher spending levels in a few categories such as accommodation costs, advertising and donations. Despite the high general inflation rate some categories recorded static costs or reductions including *Air Pilot*, Audit, Professional Fees and Depreciation.

The Honourable Company's accounts also include items which do not form part of its operating results but are dependent upon changes in the valuations of the investment portfolio managed by advisers, J M Finn.



The Consort's Badge transfers to Gill Piper (L) from Dominique Legat (R)



Wendy Joseph's audience pays close attention



Her Honour Wendy Joseph KC, Master Pewterer, addresses Members' partners and guests while the AGM takes place



The Air Pilots office team: Anna Sykes, Angie Rodriguez, The Clerk, James Ng, Eloise Cummins

Realised gains or losses on disposal of investments over the two years were insignificant. The unrealised deficit arising from the 2023 year-end revaluation of investments held in the portfolio was modest and virtually all of the previous year's unrealised loss was recovered reflecting generally improved financial market movements. Combining these investment losses and related tax adjustment with the operating surplus results in an overall modest General Fund deficit.

The balance sheet of the Honourable Company remains strong – with only a negligible reduction from last year because of the year's overall net deficit including investment losses.

The Budget for the current financial year has been prepared prudently and aims for a modest operating surplus. Thankfully, the rate of inflation is falling which should ease cost pressures. The first quarter's actual results are ahead of Budget and the outlook for the full year is favourable barring any major unforeseen exogenous economic or political shocks.

□



The busy pre-dinner reception



The Master is welcomed to dinner in the splendour of the Merchant Taylors' Hall

NEWS ROUNDUP



THE ANNUAL DAWN TO DUSK COMPETITION AWARDS DINNER

By Assistant Seb Pooley

On 8th February, the RAF Club was host to the 53rd International Dawn to Dusk Competition Presentation Dinner. The competition is now celebrating its 60th year and was conceived by our late Patron, the Prince Philip, Duke of Edinburgh, along with Norman Jones, the then-Chairman of the Tiger Club.



The winners gather on the RAF Club stairs

The competition is open to all pilots and all aircraft types. You pick a theme or objective for your flight, plan it, fly it and submit a log to a team of expert judges.

Last year saw 15 entries compete for the prestigious Duke of Edinburgh trophy, the highest number since 2004. Two of the entries were from Australia. The themes were fascinating and varied, including a circumnavigation of Ireland in a Van's RV-8 (the winning entry); flying a GT450 microlight across Wales locating and photographing sites associated with Arthurian legend;

celebrating the 80th anniversary of the Dambusters' raid; visiting Great Britain's most extreme airfields; and completing Australia in a Day (landing in every state). This year over £10,000 was raised for a number of charities including the RAF Benevolent Fund, Royal British Legion, Flying Scholarships for Disabled People and Missionary Aviation Fellowship.

The Guest of Honour for the evening was then-Master, now IPM, Jonathan Legat, accompanied by his daughter Delphine, who kindly presented the awards to the deserving winners.

The competition has many connections with our Honourable Company. All the judges are now members - Assistants Sebastian Pooley and Katharine Hodge, Liveryman Peter Benmax as well as Freeman Ian Seager and Tim Dawson. This year we were delighted to welcome back former judges Past Masters Robert Pooley and Clive Elton to the dinner.

Entries for this year's competition, which closes on 30th September, are at www.pooleys.com/dawn-to-dusk/. □

INTER-LIVERY SKIING

By Liveryman Paul Smiddy

The usual suspects arrived in dribs and drabs in Morzine in February for the Inter-Livery Skiing Championships, now back at full strength after its Covid-19 dip. When I say "usual suspects", some members of the mob were missed, claiming something called work had got in the way.



Competitors line up for the start of the triathlon

The event was - as usual - brilliantly organised by the Ironmongers, but they could not organise the snow, and conditions were as bad as we have experienced in the last 10 years or so. Although the 2025 event will be held again in Morzine, it is likely that thereafter it will move to a higher and more snow-sure resort.

The ILSC kicked off with a snow triathlon aimed at raising money for the winter sports charity Snow Camp. This gives disadvantaged city youths training for a winter sports career - see <https://www.snow-camp.org.uk/>. More sponsorship/donations will be welcome for our efforts next year.

A parallel slalom race was used to derive the seeding for the main event - the giant slalom (though not so giant this year). As we inspected the course we all noticed that a few gates were dangerously close to snow cannons, but thankfully these were changed in time for the first runs.

Highlights of the results were Upper Freeman Will Fanshawe coming third in his Men's age category, Liveryman Caro Gough-Cooper coming second in (age-adjusted) Ladies; the Ladies team (Caro, Associate Annie Cleve, and Freeman Beatrice de Smet) coming second, and our Men's team (Will, Associate Alex Reynier & Freeman Sam



(L to R) Air Pilots Reynier, Smiddy and Cleve

Rutherford) gaining third place. It should be noted that Alex was an amazing fifth fastest overall.

The evening of the prize giving dinner was as ever very enjoyable and does much for Inter-Livery bonding. The guest of honour who awarded the prizes was Alderman Sir Charles Bowman, a former Lord Mayor of London. □

NEWS FROM AFFILIATED UNITS

LONDON UNIVERSITY AIR SQUADRON

The Squadron's weekly "Town Nights" recently have featured a talk from Leonardo on Tempest developments and a tri-service event, hosting a range of Defence Attachés and giving other countries an insight into how the UAS system operates and how they could benefit from it themselves.



ULAS students visit 12 Sqn at RAF Coningsby

Eight students took part in a Force Development trip to RAF Coningsby to visit the Battle of Britain Memorial Flight and 12 Sqn, operating the Eurofighter Typhoon. The mix of old and new gave the students a unique opportunity to increase their service knowledge, both historic and present-day.

Recently LUAS Senior Student, Plt Off Em Lloyd, was presented with the 6FTS Best Student award out of almost 1,000 peers from the university air squadrons.

HMS PRINCE OF WALES

Shortly after completing a three-month deployment on the eastern seaboard of the United States, HMS *Prince of Wales* was called upon at short notice to take the place of HMS *Queen Elizabeth* in leading an international task group of eight ships - four British supported by US, Spanish and Danish vessels – in exercise *STEADFAST DEFENDER*, the largest NATO exercise since the Cold War. She brought the capability of her Lockheed Martin F-35B Lightning stealth fighters from 617 'Dambusters' Squadron at RAF Marham, submarine hunting and airborne early warning Leonardo Merlin Mk2 helicopters from RNAS Culdrose, and battlefield Leonardo Wildcat helicopters of 847 Naval Air Squadron from RNAS Yeovilton.

847 NAVAL AIR SQUADRON

847 NAS Wildcat AH1s have been fully deployed since the New Year. A part of the Squadron has deployed to Northern Norway in support of the annual winter training period *OPERATION CLOCKWORK* for UK Forces. All crews have to get used to operating in the frozen

conditions, including the infamous "ice bath". Another section of the Squadron deployed with the HMS *Prince Of Wales* for the major NATO Exercise *STEADFAST DEFENDER off Norway*.

2FTS

The poor weather over the winter has hampered gliding operations at most locations, putting us onto Operations Restricted to Paved Runways and Taxiways (ORPRAT). Nonetheless, we have flown over 4,500 air cadets in this financial year and, with good fortune in the coming weeks, should exceed the target of 5,000.

Of the remaining Volunteer Gliding Squadrons under Central Gliding Supervision, 611 VGS (RAF Honington) will begin flying air cadets in the coming weeks, and should be undertaking autonomous operations by the early summer. 632 VGS is now operational at RAF Woodvale, and should be flying air cadets autonomously by the end of March. 626 VGS, at Predannack should be in a similar situation by the end of April. There are still some infrastructure challenges with 622 VGS (Upavon Station), which mean it might not be flying air cadets for a few more months. The remaining six VGS are all operating with varying degrees of success.

Commandant 2 FTS will be taking on the role of Accountable Manager for the RAFAC Drones capability, which should stand up from 1st April, with the aspiration to encourage as many air cadets as possible to complete the baseline CAA Drone and Model Aircraft Registration and Education Scheme (DMARES).

RED ARROWS (RAFAT)

This year sees the Red Arrows celebrating its Diamond Jubilee. A new nine-aircraft show will mark the milestone season, featuring manoeuvres not seen for a generation in the Red Arrows' display routine, which changes every year. The team will sport special anniversary artwork on both sides of the fuselage and tail of the team's aircraft, featuring the sleek outlines of two Red Arrows Hawk jets. Squadron Leader Jon Bond, the Team Leader this season, says: "Many of the events we'll be part of this year will bring people together to encourage individuals to look at the importance of the STEM subjects of science, technology, engineering and maths and the role they play in powering the work of the RAF."

UK and mainland European displays are expected to be staged in May, June, July, the first half of August and early October, with a tour to Canada, named Maple Hawk, in the second half of August. □

GREEN UPDATE

On 27th February the Company Environment Group, in conjunction with the Worshipful Company of Scientific Instrument Makers and the Aviation Club UK, hosted an event at Glaziers' Hall as a follow-up to the Green Aviation event held at the same venue in 2021. The event ran as a panel session featuring airline captains Liveryman Robert Seaman (Air Pilots Environmental Lead) of Wizz Air, Paul Heathcote of British Airways and Mark Farquhar of easyJet, with the discussion moderated by Michael Hallaby of the Aviation Club.

The wide-ranging conversation highlighted the mismatch between the enthusiasm of the airlines to use sustainable aviation fuel (SAF) and the available supply: as Farquhar put it: "The entire global supply of SAF wouldn't keep easyJet flying for a week." Much attention was paid to decarbonising solutions that are already available or feasible, which could have more impact than future solutions. Seaman pointed out that the latest "New Engine Option" (NEO) airliners can demonstrate carbon-emissions reductions of more than 25% compared with older types, yet 80-85% of the current global fleet is made up of those older types.

Another topic covered was the inefficient use of airspace:



(L – R) Hallaby, Farquhar, Seaman and Heathcote discuss green initiative and challenges (A Winn)

examples quoted included the fuel wasted by following long, slow descents into airports (which could be 400kg for a single flight into London from continental Europe), and the time spent in taxiing (though much fuel could be saved by single-engine taxiing. As Farquhar put it: "On London – Amsterdam you can spend more time taxiing than flying!"

The financial aspects of decarbonising and sustainability were also covered, with Seaman pointing out that: "Sustainability should be a strategic asset to make your airline profitable - We don't go green for green." The overall message was that much more investment was needed in all aspects of decarbonising, and that the City of London was well placed to provide that investment. □

GAZETTE

APPROVED BY THE COURT 7 MARCH 2024

ADMISSIONS

As Upper Freeman

Richard James BEATON (NZ)
Juan Miguel COOPER
Mark Robert DUNCAN (NA)
Christopher John ENTWISLE (HK)
Ryan Anthony FOILS
Russell Alexander GRUNDY (AUS)
Rosina HELBIG (AUS)
Gareth Edward JOHNSTON
Richard Keith PILLANS
Andrew Douglas THOMSON
Samuel Robert TOMPKINS
Matthew John WUILLEMIN (AUS)

As Freeman

Philip Leslie EGERTON
Nigel David ROBINSON

As Associate

Toby Peter William AYRES
Alex FAJARDO BAILEY (AUS)
Rowshon Ambia CHOWDHURY
Priyanka GANDHI

Jaryd HANCKE (HK)
James Daniel HANNON (AUS)
Maisie-rae HAYNES
Kane James STANISLAS

ACKNOWLEDGED BY THE COURT 7

March 2024

REINSTATEMENT

As Upper Freeman

Keith WRIGHT (AUS)

REGRADING

To Livery

Richard GRANT
Reginald BRINDLEY

As Upper Freeman

Stephen BEALEY
RESIGNATIONS
Scott BUTLER
Grahame UNDERWOOD
Arpan DAS
Alison FIELD
John FOSTER

Michael GINN
Babak HOSEINIAN
Brian HUGHES
Stuart HUGHES
Sam HUI SH
Wayne LANG (OS)
Paul LEES
Jonathan POTE (NZ)
Robert RODGERS
Oliver TEBBIT
DECEASED
Sir Christopher BENSON
Henry HORTH
David PASCALL





THE MASTER'S MESSAGE

By The Master, Richie Piper

This is my first article as Master following the AGM and Installation meeting, preceded by the service in the Company church St Michael's in Cornhill - although copy deadlines mean I

am writing this before the Installation!

I well remember my first Installation meeting, where I was sworn in as a Court Assistant. It struck me as a very formal occasion, based on Livery traditions, and not a little pageantry. I observed the handover between the outgoing and incoming Masters, and afterwards asked the Learned Clerk and Master if we should consider a small change in proceedings to reflect the fact that we were pilots, where the installing Master would say to the new Master: "You have control" and would receive the response in turn: "I have control". Imagine my surprise they not only agreed but would amend the procedure thereafter!

I am grateful to Capt Jonathan Legat, not only for giving up the left-hand seat to me but also for the year he has had as Master, aided by Dominique and Delphine. He has been a great ambassador for the Air Pilots and a dapper presence on the City Livery circuit in his Air Pilots bow tie.

TREPIDATION

Approaching the Mastership, many thoughts have been in my mind, not least trepidation, particularly as I consider our history and our centenary in 2029. We certainly stand on the shoulders of giants. The Guild was founded by the great and good in aviation and government, as part of the aim to make Britain more "air-minded". Within a year, the Company was tested by a major setback with the Master, Deputy Master and two members of Court perishing in the R101 disaster. It is a testament to our founders that the Company survived that trial, much as we did with the challenge of Covid-19 through the support of our members and strength of our leadership.

I also reflect on the amazing and valuable work our Company members undertake. I am still learning more about what they contribute, both to the Company and wider aviation industry, to the highest standards, both in the UK and our regions. Throughout my year I will endeavour to highlight and support these good works.

So, what are my aims for the year in addition to representing the Company and supporting all its activities? They are represented by three pillars - **Extend**, **Encourage** and **Enjoy**: to **Extend** an invitation to

fellow aviators to join us; to **Encourage** young people taking their first steps in Aviation; and to make sure that members **Enjoy** all the Company can offer them.

As in the words of the song, "We have a good thing going" and during my Mastership, I will do my best to ensure that continues and we welcome more aviators to the Honourable Company.

Extend - we need to tell our aviation friends and colleagues about the Air Pilots, what we do and encourage them to join us. Some have the incorrect idea we are just a dining club, and while it cannot be denied we have some splendid dinners, we all know we are so much more than that. We do not have an issue currently with membership, but to guarantee we don't in the future, we need every member to personally recruit new blood. I have found as chair of various other organisations, that personal contact is the very best way to generate new members. I therefore ask each of you, talk to your flying colleagues and friends and recruit two new members to the Company this year.

Our Trophies and Awards, along with the Master Air Pilot, Master Air Navigator and Master Rear Crew certificates, are very prestigious and highly prized recognitions of achievement. The military understands our processes and provides excellent and timely nominations. This is not generally true in the Civil Air Transport and General Aviation sectors, where we sometimes struggle to get nominations for the worthy aviators in those sectors. We therefore need to **Extend** our reach into those communities, perhaps by briefing "agents" on what we are looking for. In this way the Trophies and Awards

Trophies & Awards – more civil and GA entries needed



committee will have the data to continue its wise deliberations and maintain the high standards of each award. So if you know someone who has demonstrated excellence and the very highest standards in aviation, now is the time to consider submitting a nomination.

We all share the common bond of passion for aviation. Indeed, for some members, they refer to the Company as their aviation family. Therefore, we should continue to **Encourage** those making their first steps in this industry. It is a great privilege and joy to be involved in our various programmes to give youngsters their start in aviation. A recent speech at Mansion House highlighted the phrase: "Send the lift back down". We can be proud that we certainly do that, and we should continue to further expand those schemes. This year we will fly the 2,000th young person under the Youth Gliding Scheme and the quality of our Scholarship graduates is recognised across the aviation sector. I have been researching the history of our PPL Scholarships with the assistance of others and, although early records are difficult to verify, we will have passed 200 PPL Scholarships awarded by this year. There is no reason that we should not have grown this to 2,500 gliding and 250 PPL scholarships by our Centenary. Thank you to Assistant Kat Hodge, Liveryman Zoe Gell, Angie Rodrigues in the Office and all the sifters and interviewers who make this happen. In addition to the Scholarships, we also fly young carers to give them a break from their responsibilities.



Youth gliding schemes are an essential part of encouragement

I would like to highlight one significant contribution, where charm and tenacity over many years has finally led to a breakthrough with government and airlines on First Officer apprenticeships. Past Master Gault is finally seeing 12 years of effort coming to fruition. This is yet another example of all the great work our members undertake, and I salute him and all the others who encourage young people into aviation.

Enjoy: as I mentioned in the Company earlier, we have a good thing going and we should all enjoy being an Air

Pilot. I first heard of the Air Pilots (then GAPAN) when bumping into some friends at the Garden Party at an airshow at Old Warden many years ago. On asking them about the Guild, they mentioned they had just spent three days on HMS *Illustrious* watching Harriers take off and land! As you can imagine, I quickly found out more and soon joined. Thanks to the Visits and office teams, we enjoy many amazing visits and events, which certainly can be described as money-can't-buy experiences. I hope members will enjoy the Garden Party in June at Brooklands, where we will have privileged access and a few members can bid for Concorde simulator sessions at a special price that will also contribute to the Master's charities. It is hoped that these simulator sessions will be conducted by Concorde pilots who are Past Masters of our Company, to make it a truly special experience.

The Master's charities for this year are the London Air Ambulance as it re-equips with new helicopters, the Jon Egging Trust and McMillan Nurses. There will be various opportunities to make contributions to these charities (look out for an Air Pilots gin!) and I appreciate whatever support you can give.



London's Air Ambulance is one of this year's Master's charities

I would like to express my heartfelt appreciation to the Learned Clerk Paul and the team at Air Pilots House - Angie, Eloise, Anna and James, who have already given me so much help, and I know I can count on their continued support throughout my year to keep me following the magenta line.

Finally, I must thank Gill for her support enabling me to undertake this role, especially at the moment. She has always been there for me and supported me in whatever I do, even offering to live in a caravan at Lasham if I switched to the airlines. She says I only have two faults: I don't listen and something else....

So, thank you for the great privilege of installing me as Master of this wonderful City Livery Company: I will do my very best to represent the Company and reflect honour on your choice. With your support to **Extend**, **Encourage** and **Enjoy**, I trust we can look forward to another successful and enjoyable year. □

PROFILE: THE NEW MASTER, RICHIE PIPER

There is one thing that unites all Air Pilots - a passion for aviation. Richie Piper first got his growing up near to RAE Farnborough, where his father was a scientist. Engineering and science were what interested his father rather than aircraft, whereas it was the other way round for Richie. In his formative years he got to witness English Electric Lightnings and Canberras, BAe Harriers, Jaguars and Tornados and many other aircraft tested and displayed at Farnborough, including Concorde doing touch-and-goes. He also remembers being taken for a walk in Elvetham Woods to the as-yet-unopened M3 to see the fatigue-test Concorde 004 moved by Pickfords to the Concorde structures building: 004 "flew" more hours, cycles and flights than any other Concorde.



The Master Richie and Mistress Gill

The Open Days were a particular delight to see things up close and Richie remembers sitting in a Lightning simulator, the sort with a massive 3D model with a black-and-white TV camera moving on a gantry to provide the graphics. Once, when on one of his many bicycle adventures, he observed a Jaguar doing grass take-offs, a very bumpy ride indeed. He was much later to understand how bumpy it was when considering using the grass to operate from when displaying WWI aircraft at the Farnborough airshow. It was too rough for them!

AN ERRANT SPOTTER

There was also a run in with the military police who noticed he was taking pictures of the Jaguar. They demanded his camera, informing him it was a restricted area. As a schoolboy taking pictures with a basic 35mm lens, he didn't think he was much of a threat - besides, they were on the other side of the fence and so he refused and cycled off! During another bicycle exploration to a point-to-point meeting at the Army's racecourse at Tweseldown, he remembers a young lady getting off her horse by throwing her leg over its head, kicking over a straw bale and giving a continual stream of swearing that both delighted Richie and caused her close-protection officer to turn red. Richie was most impressed to have met a swearing Princess!

At secondary school Richie found he increasingly needed glasses to see the blackboard, which put a stop

to his ambitions to join the RAF as a pilot. As he looked towards a career in business and software, he attended the University of Bristol, gaining a Joint Honours in Mathematics and Computers. More importantly he gained his Hang Gliding PI rating at weekends in South Wales. Just before taking his final flying test (take off, two 90° turns and a stand-up landing) he and others were rushed into the bus to take the theory exam, as they had forgotten to do it! Question 25 could fail the whole exam for you: "If you pass your PI test will you: a) buy a hang glider, b) take up parachuting, c) give up flying, d) buy your instructor a drink?" He has always tried to get this sort of question right!

RACING INTERLUDE

Whilst building a career, Richie didn't have much money for flying, save for the occasional aerotow at Lasham. Indeed, he turned to motor racing in Formula Ford for a while. The car only had a 1,600cc engine but it was an excellent class for learning skills and setting up a car. His employers gave him a little sponsorship and he proudly provided them hospitality to see him race at Donington Park. When he asked if they enjoyed it, they said "no", as after each race wrecked cars were loaded on to trucks and driven slowly back to the pits. They were dreading seeing their company logo so paraded! Incidentally, racers at Donington Park well know the effects of kerosene that builds up on the track from aircraft operating out of East Midlands. When it rains, the track becomes like ice. That makes Ayrton Senna's sensational first lap in the drenched European Grand Prix in 1993 at Donington even more amazing.



Early substitute for flying - the Formula Ford

Richie went to live in the USA to help set up a business there and, after doing the usual tourist things, found he had some free time around the monthly trips back to the UK. Thinking flying costs were substantially lower in the USA, it seemed a good time to get a PPL. However, living in Greenwich Connecticut, the nearest airport was White Plains, and the flying school was not that much

cheaper than the UK. The upside was that learning at a busy corporate and commuter airport, as well as flying through the New York TMA, provided a good experience. He occasionally did circuit-bashing at Stewart Air Force base up the Hudson River, which was long enough for four touch-and-goes on one pass of the runway.

He actually passed his flying test the morning that Gill arrived to join him for a holiday. Despite some jet lag, she valiantly went along for a flight in a Cessna 152, and that evening Richie took her on a night flight with an instructor to convert onto the C172, doing the Statue of Liberty flight for real. They actually had to climb to get over the George Washington Bridge and self-announce to other traffic in what direction they were going to orbit the Statue. They then called up the New York TMA, which cleared them over La Guardia, and returned to White Plains via Long Island. Gill was impressed with the view of Manhattan at night with the streets alternating between white and red car lights, being one way.

ANGLO-AMERICAN DIFFERENCES

When the assignment finished, he returned to the UK and quickly gained his UK PPL. However, he noted two big differences looking at the CAA charts compared with US sectionals: where the heck can you fly! UK airspace has only got more complex and restrictive since. And there was attitude to flying. In the US it was: "You want to fly, how can we help?" In the UK the ANO sets the tone in its first line: "An aircraft shall not fly unless..." - and then there are hundreds of pages of 'unlesses'!

Richie decided to take what was then called the self-improver route to gaining his commercial licence and IR with an instructor's rating on the way. He is indebted to Pike Trophy winner Piers Smerdon who guided him through the commercial training and really helped make the meagre budget go further.

In addition to pursuing a full-time career during the week, Richie instructed at weekends, first at Popham and then Southampton. It was at Southampton that he first met and flew with PM Bob Pooley in June 1992. They had a very pleasant flight to Alderney and back. In 2009 another PM, Dorothy Saul-Pooley, helped Richie with renewing his instructor rating.

RETURN TO THE AIR

Richie dropped out of flying for a few years to devote time to his young family. However, when they developed their own activities and hobbies, he found time to return to flying and got into aircraft ownership via a share in a C172 and then a North American Harvard. The Harvard kindled his interest in display flying, and Rod Dean was his mentor who helped him gain his display authorisation.



The Harvard was an early purchase...

...and the Ryan followed close behind

Richie developed a thing for radial engines which saw him adding a Boeing Stearman, a Ryan PT-22 and a share in a North American T-28 Fennec (the last two he also displayed). He also qualified for his seaplane rating in a Piper J-3 at Jack Brown's Seaplane Base at Winter Haven in Florida. Because of the awful weather that weekend, Richie did the training, written and flight tests all in a Sunday afternoon! At least he could visit Kermit Weeks' Fantasy of Flight on the washed-out Saturday.



Dogfighting in the Junkers (r)

In 2013 Richie acquired a Junkers CL-1 replica and a joined a World War One dogfighting outfit just in time for the events marking the centenary of the Great War. It proved a popular

display item, and the team was very busy. It also led to his first flight as a passenger in a radial-engined aircraft which he now flies. What is better than a radial engine? Two! One Saturday he was with a part of the team which did two displays in the South before an airborne rendezvous with the rest of the team to finish with a display at Duxford. On the Sunday the BBMF and Canadian Lancasters were to do their only display at Duxford.

AN INTRODUCTION TO THE 'CAT'

As the team members put their aircraft away in the hangars, various messages filtered through. First, the coach would be leaving the hotel an hour earlier because of the expected traffic. Then they were told it wouldn't take them to Duxford but to Cambridge airport. Did they now have to pull their aircraft out again and fly to Cambridge? No, Duxford had very kindly arranged for all display pilots to be ferried in from Cambridge in the Consolidated/Canso PB-Y Catalina. Cue lots of smiling display pilots. The team was on the second flight and from the air they could

see all the traffic chaos with people abandoning cars and walking the last mile to Duxford. Even Bruce Dickinson who then flew with the team couldn't stop grinning.

That introduction eventually led him to becoming a shareholder pilot in the *Catalina Miss Pick Up*. Richie says it is a great experience and its pilots get to do some fun flying such as the trip to Ireland last year to display at Sligo and Rush, as well as formation flying with the Royal Jordanian Falcons or practising water landings in Lake Biscarrosse between the 30 oil rigs that someone has rather awkwardly placed in the water.

As recounted in his Master's Message (p10), Richie joined the Company in 2009. The rich diversity of the Air Pilots activities has been a continual joy to Richie. He has particularly enjoyed assisting young people get their start in aviation through the various schemes the Company operates. He says that if you could bottle the excitement and joy in the room when presenting certificates, it would sustain you through an English winter.

REWARDING INSTRUCTION

Richie still instructs for Aerobility two days a week, teaching disabled people to fly. This is both a challenging and very rewarding experience. An example was a young student who, typically, because of bullying at school and her condition, had very much retreated into her shell. Through the freedom and joy of flight, she recovered her spirit. He remembers when her parents thanked him for bringing their daughter back to them; they hadn't seen that personality for some years. He also helps out instructing for the Southampton University Aviation Society on its Van's RV-12 and had the recent pleasure of checking out one of the Company's PPL Scholars.

Richie and Gill have two children: Kirsty, who works in insurance, and Rob, who is a hospital doctor. Kirsty provided them last year with their first grandchild, who they dote on. Richie and Gill are keen walkers, and their dog Sapphie (short for Bombay Sapphire) gives them plenty of excuses. They also enjoy sailing, skiing and watching sport. Richie used to play, coach and referee rugby and is footplate crew on the Watercress Line heritage steam railway that passes the bottom of their garden. Richie also crews for the Disabled Sailing Association in Torbay. He has long been interested in, and playing, music but doesn't find time to play now. His greatest musical achievement was recording at Abbey Road Studios, sadly on the day the Queen Mother died, and the single got to number nine in the charts. A party was held at the London Palladium with everyone listening to their radios for the chart run-down before the celebrations commenced. Richie says any more details would show unimpressive it really was! □



Richie tried the Aerodyne SeaRey while based in Sligo with the Catalina



The Catalina picks up a flock of Jordanian Falcons



Instructing with Aerobility is an important activity



Feet firmly on the ground with Ivatt Class 2MT on Watercress Line



Back to the circuit with the Ducati SS900

PROFILE: WARDEN CAPT DAVE SINGLETON



From a young age Dave Singleton's ambition was to fly, and he had a deep passion for all things aviation – he remembers well at the age of eight building balsa model aircraft covered with doped tissue and powered by the ubiquitous Jetex engine; the first flight of which led to his first and only experience of an uncontained engine fire and hull loss. Like many, he was an avid follower of the Apollo space programme and its predecessors. Encouraged by this, he and two friends attempted to build small rockets powered by homemade rocket fuel (much research went into this by three 12-year-old boys which, in hindsight, should have rung alarm bells with parents). The project came to an end after the destruction of their R&D and manufacturing



Building hours in Florida

facility (shed) caused by a fire and an educational interview with the firemen and village policeman, who attended and confiscated the remaining 'fuel'.

Many years later he had the great privilege of meeting astronauts Neil Armstrong and then Jim Lovell at respective T&A Banquets, with the inestimable honour of flying Captain Lovell back to the USA afterward. Undeterred by these minor initial setbacks, Dave's initial ambition was to join the RAF. However, life took a different turn and, leaving school at 15, he eventually gained an electrical engineering apprenticeship. He began learning to fly in 1978, with the still strong ambition of becoming a professional pilot, but the economic recession and aviation industry downturn in the early 1980s put this ambition on hold. His engineering career progressed to working on design and management of projects in the UK and overseas for various companies and organisations including the US Air Force, but his ambition to pursue a career in aviation remained undiminished.

In 1988 Dave embarked on the 'self-improver route' toward gaining an ATPL and, like a great many others at the time, he crossed the pond to 'hour build' in the USA so as to be able to fulfill the CAA's rules for sitting the CPL and ATPL exams. Basing himself at Merritt Island Airport, Florida, he was able to fly a number of very different aircraft and, for one entertaining and enlightening month, tow banners along the Cocoa Beach coastline.

In one memorable experience, a graduate from the local university asked if anyone would be willing to assist with a survey of eagles and their nests on the Kennedy Space Centre Nature Preserve; naturally he volunteered. All the various permissions to do this were in place and for a week (morning and evening) they quartered the Nature Preserve at low level and were even given permission to fly around the Vehicle Assembly Building and conduct touch-and-goes on the Space Shuttle landing strip!



First airline job on the 737-400

On return to the UK, Dave completed a FIC and became a flying instructor. He was fortunate, given the recent demise of Air Europe and, in quick succession, Dan Air, to find continuous work as an AFI and QFI, pilot assistant and safety pilot, whilst earning a living elsewhere.

Eventually, following a self-sponsored Boeing 737-400 rating, Dave was offered a temporary 'summer' contract, later made permanent, by Air UK Leisure/Leisure International Airways, and 18 months later, transferred to the 767-300 flying long haul, the pattern for the rest of his career. Joining Virgin Atlantic Airways in 1998, he spent over 25 years flying the 747-400 and 787-9 until retirement, accumulating over 25,000h on many and various aircraft types and, hopefully, still counting.

He joined GAPAN in 2006, becoming a Liveryman in 2013, and was first elected as an Assistant to the Court in 2016, currently serving on the ACEC with responsibility for the Company's Mentoring Scheme, as a director of APPL, a member of the Trophies and Awards committee and the Strategic Working Group.

Dave is married to Natalie, who is a Practice Manager for a large national law firm, and has a son, Christopher, a pilot for Easyjet and an Associate of the Air Pilots. He enjoys a diverse range of sports - albeit mostly as a spectator these days - and skis and sails as often as possible in between property renovation and management. □

COURT ELECTIONS: ASSISTANTS

By The Editor

At the Company's AGM on 11th March, two new Assistants were formally elected, and three retiring Assistants were formally re-elected.

THE NEWLY-ELECTED ASSISTANTS ARE:



Andrew Bloom joined the Company in 2017 as an Upper Freeman and was clothed in the Livery in 2022. He spent 22 years in the RAF flying, amongst other types, the BAe Nimrod (Captain and Flight Commander) and Shorts Tucano (Instructor and IR Examiner), and served as a Staff

Officer at HQ Northwood. A graduate of the Empire Test Pilots School Boscombe Down, he has, in civilian life, been a PPL Flight Instructor, a Senior First Officer on the Boeing 747-400 with Virgin Atlantic, test pilot with Marshall Aerospace and a Line Training Captain on the Bombardier Global Express for TAG Aviation.



Glen Fricker joined the Company in 2015 as an Upper Freeman, and was clothed in the Livery in 2023. As a freelance pilot in the 1980s he flew as a Captain on freight operations on the Douglas DC-3 and de Havilland Heron, before joining Air UK/KLM UK as First Officer then Captain on the Fokker F-27 and F-100

and the BAe 146. He then spent 21 years with Ryanair on the Boeing 737-200 and -800, and is now a freelance type-rating instructor on the Boeing 737 and 787. For the past 17 years he has been flying the de Havilland Tiger Moth and Rapide, and the North American Harvard, with Classic Wings at Duxford.

ASSISTANTS WHO HAVE BEEN RE-ELECTED ARE:



Katherine Hodge joined the Company in 2000 and a Liveryman since 2008. A Company PPL scholarship winner in 1999, she has flown the Bombardier Q400 and Boeing 737, 747, 757, 767 and 787s for Flybe, First Choice, Thomson

Airways, Thomas Cook, GSS and Virgin Atlantic. She was inaugural Chair of the Young Air Pilots and has spent 10 years on the Scholarships Team, which she now runs. She is also a member of the ACEC and the Centenary Working Group.



Capt Ed Pooley is an aviation operational safety consultant who joined the Company in 2007 and joined the Livery in 2010. A retired airline pilot of 20 years, progressing to Line and then Training Captain. He acted as Head of Safety and Chief Accident Investigator for

two airlines, and has also spent around 1,000h as a light aircraft instructor.

He has long represented the Company on the confidential reporting system CHIRP and Skybrary, more recently on the Flight Safety Foundation European Advisory Committee and its focus on the ICAO-sponsored Global Action Plan for the Prevention of Runway Incursions, and founded the Civil Air Transport (CAT) Safety Network and remains the technical lead on this service, which now distributes Safety Briefing Notes to over 7,000 pilots worldwide.



Dr Sam Waller has been a member of the Company since 2012, and a Liveryman since 2017. With a BSc (Hons) in Zoology and a PhD in Behavioural Ecology and Neuroscience, she gained her PPL in 2009 and has recently passed her ATPL exams. She has

undertaken a large number of roles within the aviation community, including as cabin crew with British Airways on the Airbus A380 and A320 family and Boeing 777 and 787, and the activities of numerous aviation charities. Within the Company she has served on the Environment Committee 2014-2015 Academic Bursary Selection Board 2018 – 2023; and Space Technical Group 2020 – present and is a Promotions Team member. □

REGIONAL REPORTS



Regional Report: Hong Kong

By Region Chairman, Liveryman Valerie Stait

Freeman Steven Cheung believes that alternative means of aerial transport will redefine what is known as urban air mobility and revolutionise the way we view short-range travel. He gives the example of United Airlines, which has ordered electric planes to connect regional spots to major American hubs, and thinks this could be a trailblazer for Hong Kong. Other companies such as Ehang in China, Volocopter in Germany and innovators in the US and UK are pushing this technology forwards.



Cheung sees a booming market for electric UAVs

With a population of seven million - and the Greater Bay Area one of 70 million - the Hong Kong region has huge potential for transforming air travel. The ability to land in a city centre, hop off the plane, and be at your meeting within minutes is a game-changer. Steven began this journey with seaplanes. However, they pose a complex challenge, involving million-dollar environmental assessments, noise restrictions and stringent regulations.

This has driven him to look at the opportunities in Southeast Asia, where support for seaplane operations continues and demand is increasing as people become more affluent. His company has invested in the Philippines and is looking to expand its operation across other countries in the region.

SUSTAINABLE SOLUTIONS

Beyond seaplanes, Steven is looking for a more sustainable way of travel that doesn't pollute the environment. He believes that electric UAVs are the future. This would not just be for commuting, but as a high-end service. Since initial operating costs are high, he envisions using UAVs to offer an exclusive experience to first and business-class passengers. As well as convenience and travelling in style, electric UAVs also offer sustainability, and have the potential to provide quick, eco-friendly alternatives to traditional helicopter services.

As with anything involving flying and innovation, considerations are many and complex. Advanced safety features are crucial, not only to enhance the safety of air travel, but also to build public trust in these new forms of transportation. Airspace use alongside existing routes and priority users like Medevac obviously needs significant collaboration. How do you communicate with ATC? How

do you communicate with a drone? How does this new technology integrate with the old? How do you introduce a new type of flying into a jurisdiction that has very established routes and procedures?

COMPETITIVE AIRSPACE

The challenges are highlighted by Amazon drone deliveries, which have been on the table for some time but are still not widely available. Many major or executive airports in America are in city centres, so the airspace is already very busy and competitive. Air Traffic Management considerations need to be worked out before there is a wide adoption of delivery UAVs, which will then pave the way for uncrewed passenger transport. For these kinds of reasons, Steven thinks the initial applications of this kind of technology would work better in developing countries that don't yet have a rigid infrastructure and where the setup costs are relatively low. With technology rapidly advancing, he expects the way to be led by cargo, government and medical, as they would not have people are not on board initially and these services have money to invest. Cybersecurity and battery recycling are other considerations and Steven acknowledges the need for industry collaboration to address these challenges.

UAVs also have very restricted payloads, but passengers have luggage, which would need to be picked up and shipped to the airport a couple of hours before a drone collected the passengers.



Waterborne aircraft may still have a future

The complexities of international travel also need to be overcome, including customs and quarantine, for this kind of aerial transport to run effectively. However, as integration within the Greater Bay Area improves, Steven is confident that these services will become more accessible to Hong Kong. Despite the obstacles, Steven remains highly optimistic about the future of urban aerial vehicles and being involved at the beginning of a new era of transport. The technology is there, but the way it is going to interact with existing infrastructure in the real world is going to be a very interesting conundrum to work out. Seaplanes and electric UAVs are set to enhance, rather than replace, mass transit systems, he confirms. They will forge a new chapter in the story of air travel characterised by luxury, efficiency, and sustainability. □





Regional Report: Australia

By Chairman Spencer Ferrier

The Honourable Company's Australian Region has continued to move apace. It was a great pleasure to meet our Master, Capt Jonathan Legat and his wife, Dominique, when they toured as the second iteration of our Masters' post-covid contact. As this is my last report as Chairman, there are a number of people who I would like to thank for their contribution during my term.



New Chairman
Adrian Young

I am delighted to let you know that Liveryman Capt Adrian Young has agreed to take the reins as Australian Chairman. I expect that he will bring fresh views and energy to the office. His formal election will take place in mid-March 2024. His experience as an operating captain, and as an engaged aviation executive, will provide the Company with the orders of skill and experience that will balance nicely my contribution from a personal, General Aviation point of view. His Chairman's attention will bring back a transport-based focus which is where, as a Company of Pilots, I think our emphasis should lie.

We have been very much encouraged and assisted by the contributions of Upper Freeman Arnie Morschek, who has most capably and smoothly managed our programme of scholarships. It is no easy task to select the candidates with the most likely potential to advance themselves by such an award and we look forward to those people choosing to become Members of the Company themselves. I personally thank Arnie for his positive assistance to the Air Pilots and the goodwill that he has engendered by his actions.

ARCANE KNOWLEDGE

I am also very much appreciative of the arcane knowledge

of Liveryman Capt Brian Greeves, whose ability to present the Company's position on technical matters has been of great benefit to the aviation industry and of course the Air Pilots' position as a useful contributor to technical progress. My discussions with Brian have been of great value to me and I thank him for his contribution.

Liveryman Capt Peter Raven AM has managed the Australian Region's Trophies and Awards activities, and has shown again his subtle and effective understanding of this part of our activities. Peter's understanding and ability to see and encourage activities well beyond what looks like the next step is an attribute that is enviable indeed.

Our Treasurer, Freeman Deb Evans, has survived the inundations of the weather at Cairns in far North Queensland. She and her husband are due to fly south for the Victa Airtourer Association's meeting at Bathurst, West of Sydney, in early May. That will provide a terrific opportunity for me to meet and thank Deb personally for her contribution during my Chairmanship.

Unstinting personal assistance to me from the contributions of Liverymen Mike Cleaver, Rob Moore and Paul Dare were both appreciated and enjoyed. Upper Freeman John Minns from Brisbane and John Siebert from Adelaide have made significant contributions to advance the Company as well.

Ultimately, I must personally appreciate the formidable contributions of Liverymen Capt Peter Norford and Capt Robert Dicker. The smooth running of the Air Pilots in Australia is entirely due to Peter's and Robert's clarity and effective management. They keep the organisation on its rails, as if shod with silent rubber wheels. Their assistance to me has been the clearest demonstration of those skills that I have seen and has made a true reality of the Honourable Company in Australia. Thank you, Gentlemen. □

On 2nd-3rd March Airshows Downunder Shellharbour was held at the Shellharbour Regional Airport, about a 1h drive south of Sydney. PM Robin Keegan was able to attend the last Wings over Illawarra airshow during his tour of Australia in 2022, before the event was taken over by the AMDA Foundation (which also runs the Avalon Airshow), renamed and rescheduled for March this year.

Wings over Illawarra was often severely impacted by weather and, unfortunately, this was also the case for the new show, with the first day affected by low



Lockheed Martin F-35 makes an impact downunder
(©Commonwealth of Australia)

clouds and reduced visibility. However, the Sunday dawned "fine and beaut" with 8/8 blue sky, much to the organiser's relief.

Liveryman Rob Dicker





The New Zealand Aviation Federation

By Liveryman Allan Boyce Chairman NZ Region

The New Zealand Aviation Federation (NZAF) was founded in 1981 for the purposes of

- Encouraging, promoting, protecting and supporting members' activities.
- Promoting and encouraging aviation and any associated act craft trade or profession
- Promoting a safe accessible vibrant general aviation environment
- Providing a:
 - forum for members to share information;
 - combined voice for all member general aviation organisations;
 - centre of information and advice on matters pertaining to general aviation in New Zealand;

It is a forum of 18 organisations, mainly recreational sports clubs directly representing just about every aspect of aviation other than the large scheduled commercial operators. (Although Air New Zealand is a member of the Aviation Industry Association (Aviation NZ) and its Chief Pilot is a Vice-President of that member organisation). Unlike GASCO there are no government agency members permitted.

The NZAF memberships had a combined representation in 2021 of more than 10,500 aviators who own more than 4,000 GA aircraft and 42,000 model aircraft and drones. It has a Council of Representatives (one for each organization), a paid secretary and a President (Liveryman Bob Henderson) and Vice-President and a Treasurer. Our Region's Hon Chaplain Richard Waugh has recently joined the Council as President of the New Zealand Aviation Historical Society.

SIMILARITY TO GASCO

NZAF is similar to the UK's General Aviation Safety Council (GASCO) but with significant differences. The purposes of GASCO are stated as:

- To collect, collate and disseminate flight safety information among users of UK registered general aviation aircraft;
- To study all matters affecting, or which might affect, flight safety in UK general aviation and to make recommendations to interested parties, as necessary.

Another major difference is our funding source. After New Zealand changed its regulatory regime to a Rule Based System, the aviation examination part was devolved to a private company, Aviation Services Ltd, owned by NZAF and Flying NZ (the trading name of the Royal New

Zealand Aero Club). ASL, now rebranded Aspeq, has been a huge success, and is now a global company providing licensing exam and assessment services to 26 countries. It has moved into other industries, and now aviation is only a small part of its overall services. It has provided steady dividends (most years) to its owners.

This financial support has enabled the NZAF to engage in a wide variety of activities. For example:

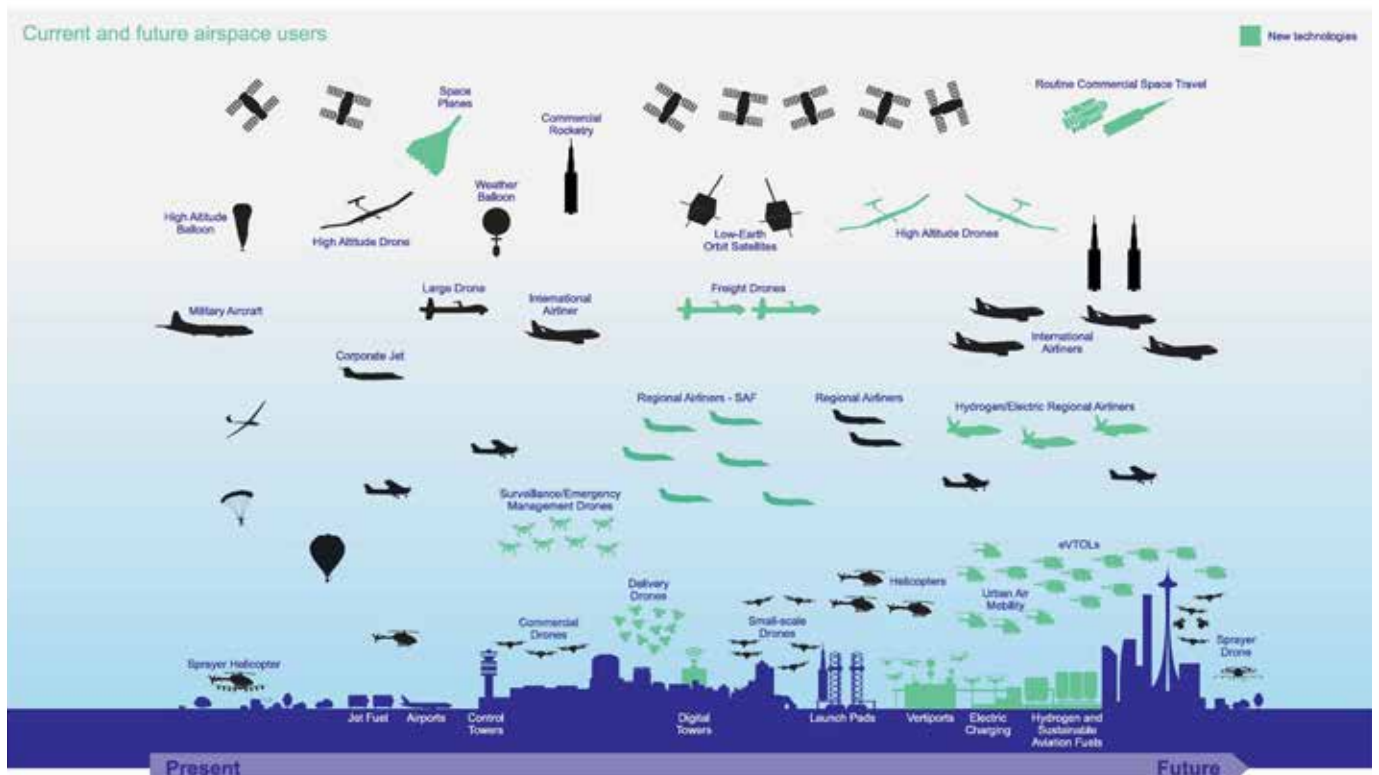
- Presence at public air displays like *Wings over Wairarapa* and *Warbirds over Wanaka* - part of STEM (science, technology, engineering, mathematics) projects;
- Scholarships award as part of promotion. While I have been representing the New Zealand Region of the Air Pilots, an annual scholarship was arranged for female engineers at an aviation-minded Technology Institute, and another member donates annually a toolbox to a worthy student. The Air Pilots also has an Instructor Re-categorisation Scholarship in collaboration with the Walsh Memorial Scout Camp, awarded annually;
- Work in the CAA part I 49 Forum – Aviation Recreational Organisations Certification;
- New Southern Skies (NSS) advocacy for GA in the new airspace system;
- Satellite Based Augmentation System to be included in our national infrastructure;
- Medical Matters Licence cost advocacy;
- ADS-B subsidy advocacy and certification in microlights;
- Rule change advocacy.

REVIEWS AND UPDATES

The recent Air Navigation System Review in New Zealand has provided a potential roadmap for the future. This is all about sustainability - which we applaud - while at the same time we need to acknowledge that we are operating with human and financial resource constraints which are hindering the development of organisations and innovation.

Updating the Civil Aviation Regulations (CARs) to make them fit for purpose is a real challenge and the pressure on the government budget is huge from many quarters – health, teaching, infrastructure, defence, police and many others. The bottom line is that current activities enabling aviation in New Zealand must be funded appropriately or there may be little left for the future vision of sustainable





The NZ Air Navigation System Review highlights the variety of future airspace users (NZ Government)

aviation in the country.

Proposed local updates to District Council and Regional plans are creating potentially disastrous unintended economic consequences. Poorly informed decisions are being made about the appropriate levels of activity at established airfields with the flow on effect of negative impacts on the sustainability of aviation activities that support the farming, infrastructure and tourism sectors of the economy.

Many changes proposed to District Plans would see aerial operators driven out of business and the farming sector economically devastated with the consequential flow-on effect to the economic health and well-being of New Zealand Inc. NZAF members are actively working to provide Councils with knowledge to assist them in their decision-making. Secondary and Tertiary airports need to be recognised as national strategic resources and protected from ill-informed decisions and planning.

RESILIENCE NEEDED

Cyclone Gabrielle and other recent natural disasters have demonstrated the need for resilience across the entirety of New Zealand's transport networks. It has been acknowledged that the road and rail links are tenuous, and aerial support to many regions may be the only option.

We are faced, however, with examples of developers seeking to encroach on existing airports with housing and industrial designs, and local planners allowing housing encroachment at airports. (Does that sound familiar?)

The nub of our concern in all these areas is about

SUSTAINABILITY – of General Aviation and aviation activities and training which benefit the wider society. Sustainability is not just about the type of energy used to power aircraft – it is also about social drivers around equality, honesty, excellence, commitment, courage, teamwork, respect for rules and laws, respect for self and others, community spirit and solidarity,

Aviation contributes 2 - 2.5% of the climate change equation yet is treated as a pariah, often by the same people who are only too happy to take

advantage of the speed of air travel. By the end of 2023 the demand for air travel was exceeding that of 2019, prior to the impact of Covid-19. There is a strange double standard being applied to aviation by the public and, potentially, those in positions of political influence.



Helicopters feature strongly in NZ GA activity ((Beck Helicopters)

The infrastructure airports provide national-wide is a multiplier, adding resilience and flexibility to the nation by forming vital links in the overall transport network. These airports need to be protected to add to public safety and support in times of natural disaster.

Acknowledgement to Liveryman Bob Henderson who presented a similar presentation at a recent RAeS Symposium and allowed me to use his slides and notes.

□





Regional report: North America

By Chairman Liveryman Jonathon Dugdale

I write this article with one eye on the 59th playing of the Arnold Palmer Invitational, a PGA (Professional Golf Association) Tour event held at Arnold Palmer's Bay Hill Club and Lodge in Orlando, Florida.

Palmer (1929 – 2016) enjoyed a career spanning more than six decades after turning professional a few months after his 1954 US Amateur victory. He won 92 championships of national or international stature, including seven major championships. His major victories include four wins at the Masters Tournament, two wins at The Open Championship and a victory at The US Open – but he was also an enthusiastic and record-setting aviator.

AWARDS

Palmer was bestowed with numerous awards, including: Charter Member; World Golf Hall of Fame; American Golf Hall of Fame; PGA Golf Hall of Fame; and Associated Press Athlete of the Decade (1960 – 1969). Other awards included nine Honorary Doctorates and the Presidential Medal of Freedom from George W Bush.

His philanthropic work was extensive, extending to healthcare, education and community, exemplified by his co-founding of the Arnold Palmer Hospital for Children in Orlando Florida, one of the most respected pediatric health Institutions in the USA, and the Winnie Palmer Hospital for Women and Babies, which is named after his wife, Winnie (1934 – 1999). He said: "Making a positive change in the life of a child is one of the most significant things you can do."

LEARNING TO FLY

Next to marrying his wife, Winnie, and deciding on a professional career in golf, there's only one decision Arnold Palmer considered smarter - and that was learning



Palmer started out leasing a Cessna 175

how to fly. He didn't just like to fly, he loved to fly.

In 1955 at age 26, Palmer started his private pilot's licence (PPL) instruction at his hometown Latrobe Airport, Pennsylvania (LBE), which was renamed Arnold Palmer Regional Airport in his honor

in 1999. He was originally instructed by Babe Krinock in a Cessna 172 at \$3 per hour. After obtaining his PPL in 1956, his instrument and multi-engine ratings would soon follow. After winning The Masters in 1958, he leased a Cessna 175 and hired a co-pilot to fly with him, but it wouldn't be long before he was flying solo.

In 1961 he made his first aircraft purchase, an Aero Commander 500. A few years later he purchased a new Aero Commander 560F and then, in 1966, a Rockwell Jet Commander with a cruising speed of 500mph (435kt) and a range of 2,000 nautical miles. This was Palmer's first jet, and a game changer as he traversed the country playing professional golf. Following the Jet Commander, he upgraded to a Learjet followed by five different Cessna Citation Jets. His last plane was a Citation X, an aircraft with international range.



He moved on quickly to an Aero Commander

ROUND-THE-WORLD RECORD

In 1976, from London's Heathrow Airport (LHR) and Orly Airport (ORY) outside Paris, the first Concorde carrying commercial passengers simultaneously took flight, the Space Shuttle Enterprise was unveiled, and two Viking missions successfully landed on Mars. The USA Bicentennial celebrations marking the 200th anniversary of the adoption of the Declaration of Independence were in full swing. This same year Arnold Palmer and three others set out on an around-the-world flight in a Learjet 36 appropriately registered N200Y.

The Learjet left Denver's Stapleton International Airport (since decommissioned) eastbound on 17th May 1976, returning to the same airport on 19th May, having made stops in Boston, Wales, Paris, Tehran, Sri Lanka, Jakarta, Manila, Wake Island and Honolulu. In Sri Lanka, Palmer was greeted by an entourage, including an elephant that he rode while handing out Bicentennial flags and bronze replicas of the Declaration of Independence. This flight



Palmer's round-the-world record still stands

set a world record, circumnavigating the globe in 57h 25min 42sec, one that still stands today for that class of jet.

Arnold Palmer made his final flight at age 81 in his Cessna Citation X from Palm Springs (PSP), California to Orlando (ORL), Florida, closing his logbook with about 18,000h. He is quoted as saying: "To put it quite simply, I could never have accomplished even half as much as I have in my golf and business careers over the last four decades without having my own airplanes."

<https://www.blog.arnoldpalmer.com/90for90/25-sets-an-unbroken-flight-record> □





REPORT: THE YOUNG AIR PILOTS

By Chairman Freeman Dominic Registe

As is customary at this time of the year, a change in Master within the Honourable Company of Air Pilots affords me the privileged position of being able to openly thank now-IPM Jonathan Legat for his support and welcome Master Richie Piper. Whilst change can often foster apprehension, without question, there is much to celebrate, reflect on and look forward to. I will also use this opportunity to announce that this coming Air Pilots year will be my last in post. Connecting, supporting and promoting the next generation of aviators as Young Air Pilots Chair over the past two years has been an honour, and one that I certainly aim to build upon in the time I have remaining. Uniting and integrating pilots from all areas of aviation to create an unrivalled network of knowledge and experience continues to be a core objective, and at the heart of this work is always the Young Air Pilots Committee. Strong individuals form the foundations of strong teams, and I am incredibly excited to work alongside what will be the most diverse and comprehensive YAP Committee to date. With no uncertainty, remarkable things will be possible with all of you in the fold and I look forward to creating an even stronger Young Air Pilots community in the process.



Associate Alice Goodwin appeared on ITV's Good Morning show, representing Virgin Atlantic Airlines, on International Women's Day, 8th March

The success of the Company's scholarship programme also continues to push new bounds, with a record number of PPL (774) and Gliding (319) scholarship applications received. Young Air Pilots supported the initial sifting stage this year and, with final interviews at Air Pilots House to follow in the coming weeks, the opportunity to support the next generation of aviators continues. It is abundantly clear just how much of a positive influence Company scholarships can have in terms of shaping future aviation careers, and with news that more scholarships will be provided this year than ever before, it is an incredibly

exciting time for the Company and aspiring aviators.

The start of the Air Pilots year also signifies the start of the new YAP social calendar, with the first marquee event being The Young Aviators Dinner, to be held once again at The Royal Air Force Club, London, on 6th April. The Honourable Company of Air Pilots partners with The Air League to stage what is undoubtedly the pre-eminent young aviators' event in Europe.

In a development from previous years, some subtle but effective changes will be made to further enhance the experiences of both members and guests attending. To significantly encourage practical networking opportunities and connections, a far greater emphasis will be placed on the seating plan to ensure those in attendance are seated favourably based on their interests, flying experience and desired career path. To aid this move, Young Aviator Dinner Ambassadors (YADAs) will be selected from different areas of aviation to champion their respective fields and, naturally, to support the next generation of young aviators.

With tickets already sold out at the time of writing, I am very much looking forward to seeing many of you there. For those who can't attend the dinner, rest assured that the most comprehensive social calendar to date is already near completion and something the YAP Committee looks forward to delivering in this Air Pilots year. □

The YAP Chairman has been sampling the delights of the North American Harvard





SPOOFING AND JAMMING

From the desk of the DAA, PM Nick Goodwyn

Air Pilots members who are routinely flying commercial air transport in and around parts of Europe and the Mediterranean have highlighted interferences to navigation systems, particularly around current conflict zones. Whilst this is not a new phenomenon, it is the significant increase in occurrences and concerns over enduring safety and alternative methods of navigation or system redundancy that raise interest. For example:

1. *“Few days ago, flying to Cairo, while approaching FIR border (close to Tel Aviv FIR) still with Jeddah ATC we got first ADS B reporting fault losing both GPS and then FMS/GPS position disagree. GPS coordinates were 7° different from IRS. Verified with the chart, NAV accuracy check, and GPS deselected for the rest of the flight. Same thing on the way back. My FO and SO (trainee) were confused (never flown without GPS PRIMARY), so I explained to them how to address such a situation. Luckily, FMS did not accept wrong co-ordinates but gave us a warning.”*
2. *“It’s a regular occurrence for fleets operating in Baghdad, Amman, Cairo and Ankara FIRs for the airline. On the 777 we now inhibit GPS as we approach the boundaries and use radio aid updating as the primary navigation source. If we’re still having symptoms of Radio Frequency Interference approaching TOD, we’re authorised to override EGPWS.”*
“Did all the above to the letter as required by SOPs and still got a spurious EGPWS pull-up on final into BLR the other night. Did a very nice pull-up manoeuvre from 5,000ft (below MSA), ATC didn’t seem at all surprised. Whilst we are not required to fly a pull-up GA above FL250, there’s no discretion below that. It’s far from ideal that we are receiving a significant number of spurious EGPWS warnings which can dilute their effectiveness, far less ideal that we are experiencing map shift and vertical spoofing in an area where Iran, the Russians and the United States are conducting military operations. Add some weather avoidance and perhaps a crew with diminished SA and there is the possibility for an unfortunate outcome.”

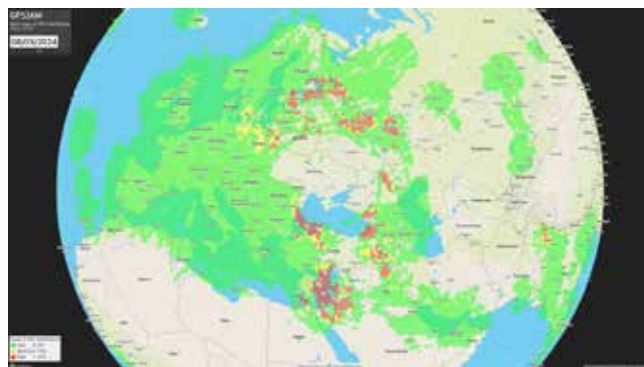
SURGE IN REPORTS

In recent months a surge in reported GPS interferences across Europe has drawn attention to the critical role of accurate navigation systems. A valuable resource for aerial surveying companies navigating these challenges is the website GPSjam (<https://gpsjam.org>) which utilises

data from ADS-B Exchange to generate maps illustrating likely GPS interference based on aircraft reports. The map classifies areas where aircraft report good navigation accuracy (green), moderate accuracy (yellow), and low accuracy (red), potentially indicating interference. This user-friendly tool aids in identifying regions prone to navigation challenges. It highlighted a significant surge in disruptions over northern Poland and southern Sweden on Christmas Day, emphasising the potential impact on aviation and critical infrastructure. Recent disruptions in Finland prompted an official response from the Finnish Transport and Communications Agency, assuring the public of aircraft equipped with alternative navigation systems to counter potential risks.

‘SPOOFING’ AND ‘JAMMING’

Global Navigation Satellite System (GNSS) jamming and spoofing incidents have increasingly threatened the integrity of Positioning, Navigation, and Timing (PNT) services across Eastern Europe and the Middle East. Similar incidents have been reported in other locations globally. GNSS is a service based on satellite constellations such as the US Global Positioning System (GPS) and EU’s Galileo. ‘Jamming’ blocks a signal, whereas ‘spoofing’ sends false information to the receiver on board the aircraft. Jamming is an intentional radio frequency interference (RFI) with GNSS signals. This interference prevents receivers from locking onto satellite signals and has the main effect of rendering the GNSS system ineffective or degraded for users in the jammed area. Spoofing involves broadcasting counterfeit satellite signals to deceive GNSS receivers, causing them to compute incorrect PNT data.



Screenshot from <https://gpsjam.org>, 8th March 2024

Detection of jamming or spoofing, as well as distinguishing which type of interference is being experienced, is difficult, as there are generally no specific flight crew alerts for interference. Depending on aircraft integration, various



side effects of jamming have been observed which could be attributed to spoofing and vice-versa.

The effects of GNSS jamming and/or spoofing have been observed by crews in various phases of flight, in some cases leading to re-routing or diversions, to ensure safe continuation of flight, and also triggering false Terrain Awareness and Warning System (TAWS) Alerts. Under the present conditions, it is not possible to predict GNSS interference or its effects. The magnitude of the issues generated by these interferences depends upon the extent of the area concerned, on the duration, on the phase of flight, and how dependant are the aircraft systems on GNSS signals.

EUROPEAN MEASURES

These disruptions pose significant challenges to aviation. Such attacks belong to the domain of cyber security, a safety threat for which the National Aviation Authorities (NAAs) in Europe had explicitly tasked the European Union Aviation Safety Agency (EASA) with taking measures to counter this risk.

In January 2024, EASA and the International Air Transport Association (IATA) announced the conclusions of a workshop jointly hosted at EASA's headquarters on combatting incidents of GNSS spoofing and jamming.

The workshop's high-level conclusion was that interference with satellite-based services that provide information on the precise position of an aircraft can pose significant challenges to aviation safety. Mitigating these risks requires short, medium and long-term measures, beginning with the sharing of incident information and available remedies.

"GNSS systems offer tremendous advantages to aviation in increasing the safety of operations in a busy shared airspace," said EASA Acting Executive Director, Luc Tytgat, "but we have seen a sharp rise in attacks on these systems, which poses a safety risk. EASA is tackling the risk specific to these new technologies. We immediately need to ensure that pilots and crews can identify the risks and know how to react and land safely. In the medium term, we will need to adapt the certification requirements of the navigation and landing systems. For the longer term, we need to ensure we are involved in the design of future satellite navigation systems. Countering this risk is a priority for the Agency."

Wille Walsh, IATA's Director General, said: "Airlines are seeing a significant rise in incidents of GNSS interference. To counter this, we need co-ordinated collection and sharing of GNSS safety data; universal procedural GNSS incident guidance from aircraft manufacturers; a commitment from states to retain traditional navigation systems as backup in cases where GNSS are spoofed

or jammed. In actioning these items, the support and resources of EASA and other governmental authorities are essential, and airlines will be critical partners. Whatever actions are taken, they must be the focal point of the solution as they are the front line facing the risk".

AGREED MEASURES

Measures agreed by the workshop to make PNT services provided by GNSS more resilient include:

- **Reporting** and sharing of GNSS interference event data;
- **Guidance** from aircraft manufacturers;
- **Alerting:** EASA will inform the relevant stakeholders (airlines, air navigation service providers (ANSPs), manufacturing industry and airports) about attacks;
- **Backup:** Aviation must retain a Minimum Operational Network (MON) of traditional navigation aids to ensure there is a conventional backup for GNSS navigation.

Last year, the UK CAA issued SAFETY NOTICE SN 2023/001, titled *Global Navigation Satellite System Outage Leading to Navigation/Surveillance Degradation*.

Both EASA and the UK CAA have recognised that assurance in redundancy of systems should be paramount, and they seek to ensure that the GNSS outage or spoofing topic is included in the flight crew ground recurrent training, highlighting the identified operational scenarios to recognise and react in a timely manner to different jamming and spoofing cases.

CONSIDERING RISK

The need to assess operational risks and limitations linked to the loss of on-board GNSS capability, and to ensure that operational limitations introduced by the dispatch of aircraft with inoperative radio navigation systems in accordance with the Minimum Equipment List, must be considered before operating an aircraft in the affected geographical areas.

Flightcrew need to be able to verify the aircraft position by means of conventional navigation aids when flights are operated in proximity to the affected areas; check that the navigation aids critical to the operation for the intended route and approach are available; and remain prepared to revert to a conventional arrival procedure where appropriate and inform air traffic controllers accordingly.

The question is: are new flightcrews adequately trained and prepared not only to be able to recognise when safety is compromised, but also to have the skills and knowledge to revert to more traditional methods of en-route and approach navigation systems? A topic for the Company's International Technical Forum? □



A DAY OUT WITH CLASSIC WINGS

By Assistant Glen Fricker.

Classic Wings has been "part of the furniture" at Duxford Aerodrome for over 30 years, and as operator of the de Havilland Dragon Rapide G-AIYR, it qualifies as operating the oldest aircraft still in commercial service in Europe (built in 1942).

A typical Saturday during the season (Easter through to Remembrance Sunday) starts around 08:30 to 09:00 for pilots and ground crew. Ground crew are mainly volunteers, sometimes rewarded by trips in the aircraft on empty sectors.

The aircraft in use for the day are manhandled out of the hangar, preflight checks, fuelling and daily inspections done, followed by a warm-up and engine runs. All being well, the Rapides and DHTiger Moths are taxied up to our parking area roughly in front of our hut at Duxford.

The two-seat Supermarine Spitfire, currently leased from Biggin Hill, is towed up to its usual spot in front of the control tower:

BRIEFING FOR A BUSY DAY

We'll then have a crew briefing, weather, NOTAMS etc plus covering today's missions, pilots and ground crew introductions. It's a standard day for the Tigers - mainly trial lessons, but some of the customers may be on the wing-to-wing flights, plus a few *ad-hocs*. For the Rapides and North American Harvard: two wing-to-wing sorties with the single-seat Mk IX Spitfire RW382, plus a flight over London, followed by standard pleasure flights. The Harvard will also be joining in with the wing-to-wing flights, followed by trial lessons! There will also be around six pre-booked two-seat Spitfire flights, mostly lasting some 20min each.

Duxford's doors open to the public at 10:00, and first flights of the day are off blocks at around 10:30, with up to four of Classic Wings' current fleet of six Tiger Moths

and the two-seat Spitfire taking to the air with their respective "students" for flights varying between 15 and 40min. Customers will have been briefed beforehand by the respective ground crews, with the aid of a short video presentation. Only one of our Tigers is fitted with an electric start; all of the rest are started by the traditional "Armstrong" method!

Wing-to-wing flights with the single seat Spitfire normally start around 11:30, the customers having been briefed not only for the standard safety procedures for the Dragon



The fleet, taken from Rapide G-AIYR, en-route back to Duxford from The Blades Midsummer Ball, 2023

Rapide or Harvard, but also a chat with the pilot and a good look around the Spitfire. These flights are carefully choreographed so that the customers get the best views, and we make best use of the Spitfire's time. It's literally the nearest you'll get to flying in a single-seat Spitfire without actually being in it!

The wing-to wing

Spitfire experience involves a few minutes flying in close formation on either side of the Rapide or Harvard, plus some more dynamic views as the Spitfire peels off for some passes above, below, ahead and behind. That's most challenging when in formation with the Rapide; we've found it best for the Rapide to make a gentle turn keeping the Spitfire on the outside.

Keeping our current fleet of six Tigers, three Rapides, five assorted Cessnas (used mainly for PPL training at Duxford and Clacton), a Piper Cub, plus the Harvard (dry-leased in from Earls Colne), is the job of our in-house maintenance team. They're nominally based at Clacton though some of the maintenance is done at Duxford.

One of the biggest problems associated with operating these vintage aircraft is finding spare parts, which are rapidly becoming as rare as rocking-horse poo! Any leads to Gipsy engine parts, Tiger Moth and Rapide spares are most welcome!





Spitfire IX RW382/G-PBIX flown by George Hays and Harvard G-TSIX flown by the author in formation with Rapide G-AIDL flown by Craig Brierly.

Suitable pilots are becoming equally hard to find, particularly for the Rapide. It's becoming increasingly difficult to have someone with the right combination of age (60 years old is the limit for the Rapide on public transport operations), availability (as we operate the Rapide on an AOC, all flying duty hours are accountable), and skill set - a commercial pilot's licence, multi-engine piston and vintage tail-wheel time are obviously a must-have, and aptitude to operate in what can sometimes be a very challenging environment.



Preparing for a flight in Tiger Moth G-ANRM, aka Classic Wings 7

Over the years, Classic Wings has operated a wide variety of aircraft types, including Yaks, Beech King Airs and Chipmunks. Other types of flying have included pleasure flying and trial lessons from other venues such

as Goodwood, Norwich and Northampton Sywell. Most of the fleet has appeared at one time or another in films, TV programmes and advertisements. Corporate days are quite popular too.

RESTRICTIVE LIMITS

Our weather limits are similarly restrictive, wind and low cloud base, (unfortunately an all-too-familiar part of a British Summer!) normally being the main culprits for scrubbing the day's flying. As a team we use a WhatsApp group chat to make a decision the night before on the weather suitability for the next day, trying to give our customers as much notice as possible, cognisant of the fact that many have to travel a long way. Quite often we have had customers travel from as far away as Australia and New Zealand!

On air show days, the start is a little earlier, with the first flights aiming to be airborne by 09:00, though all-too-frequently thwarted by typical air show weather! As no flying is permitted for us during the display, we're allowed to fly after the display finishes, up until 19:00 usually.

At the end of a good day's flying, which normally finishes by 18:00, the fleet may have achieved up to 70+ sectors between them, weather permitting. One of the Rapides and the Harvard stay parked outside, while for the rest, it's a good de-oiling of the outside of the aircraft, which also doubles as post-flight inspections, then back into the hangar for the night. □



TO NEW YORK FOR A CIGAR

By PM Ian Perry

PM Bannister's book on Concorde* (*Air Pilot*, April 2023) reminded me of my experiences about this iconic aircraft. When I became Master of the Company, PM Capt Jock Lowe asked me if I had been

on Concorde. I replied that I had not, as I had been unable to go on two proving flights, due to work commitments. I explained that on the first aviation medicine course at the RAF Institute for Aviation Medicine we, the students on the course, got involved during the aircraft design and work psychology lectures in looking at the design and layout of Concorde's cockpit. I asked a few questions about the eye levels and some of the instruments and was told that it had all been worked out and approved. I remarked that somehow four of the instruments did not seem to be in the eyeline that we had just been discussing. This provoked a flurry of conversation and activity. It turned out that my comments were correct, and some of the instruments were subsequently moved. This resulted in an extra rivet, called "Ian's Rivet", appearing in the instrument panel - not many people knew that, until now.

A REWARD OFFERED

I was rewarded for this incredible input by being selected to go on a proving flight. I was duly sent an invitation and a ticket. I was to be seated next to the Archbishop of Canterbury - nearer my God to Thee. Unfortunately, at that precise time I was going to be in the USA, so I was unable to meet, and fly with, our religious leader. I was sent another invitation, but again, I was unable to fly on that day, so I never made a proving flight.

Jock said that the matter had to be resolved: the Master had to fly on the world's fastest airliner. A ticket subsequently arrived: this time the flight had been arranged around my work schedule. On the day I proceeded to the Heathrow Concorde departures lounge and on time - Concorde was always on time - boarded the aircraft. I was sitting next to a Saudi Arabian banker who had come from Jeddah on a Boeing 747, and transferred to Concorde. He was going to New York to sign an agreement, shake someone's hand, and fly back next day. I told him that I was only going to New York for the day, as I was coming back on the afternoon flight. I was invited to the cockpit for take-off. It reminded me of my flight in an English Electric Lightning T5, going up

to 60,000ft (18.3km). The Lightning did not have a droop snoot, which was now raised, and we levelled out and continued to accelerate. When you are now flying at Mach 2, (1350mph, 2,150kmh), that is faster than the average bullet. When I had qualified for my Mach 1 tie in the Lightning over the North sea, I had been wearing the necessary pressure suit and oxygen breathing equipment, flying boots and gloves, but now here I was, wearing a blazer and tie, having a very fine lunch and a glass of wine, in a very pleasant but narrow aircraft cabin, going even faster than I had done in one of our fighters.

The rest of the story is boring. We arrived in New York; I went through Immigration/Customs. Round the corner was the crew bus, which drove me to Times Square, where I sat on a bench and smoked a cigar. At the pre-arranged time, about 30min later, the crew bus picked me up and we went back to the airport.



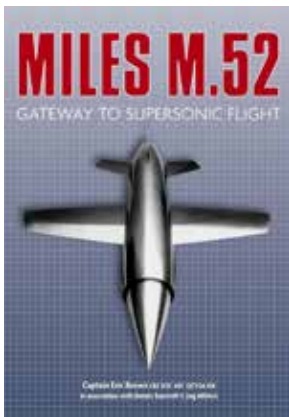
Good for a double Atlantic crossing in 1996, but no longer

I went through the procedures and boarded the plane. I was welcomed by a different crew, and we flew home. The flight crew invited me to the cockpit, and I saw another take-off and landing. It turned out that I was the only person on board who had flown to New York for just the day.

I was back in my house and in bed by 23:30, still finding it difficult to believe that I had got up at 07:30 and been to America and back, all in a day. It will be some years before anyone can do that again. Thank you, Jock, for having made the trip possible.

*Concorde by Mike Bannister, published by Michael Joseph □





BOOK REVIEW: MILES M.52 GATEWAY TO SUPERSONIC FLIGHT

By PM Dorothy Saul-Pooley

Some readers will have noted the Editor's extensive review of *Winkle*, Paul Beaver's recent biography of one of our illustrious former Liverymen, Capt Eric (Winkle) Brown. Around the time that review was published, I received an email from PM Chris Hodgkinson, who was reading *Winkle* and had come across the many references to Miles Aircraft mentioned in the book. He noted the recent loss of Liveryman Jeremy Miles, who was the only son of Fred and Blossom Miles, the founders of the Miles Aircraft Company. I confirmed that I had attended Jeremy's funeral and asked if PM Hodgkinson had read *Miles M.52 Gateway to Supersonic Flight*, as it had been co-authored by Eric Brown, and I happened to have a copy, signed by Jeremy Miles, in my possession.

After reading the book, PM Hodgkinson suggested that I should write a review. Although the book is not new, having been written over 10 years ago, the third edition, to which Jeremy Miles had contributed, was published in 2016. Jeremy had been one of my companions during my year as Master and had often spoken of the dreadful toll the M.52 saga had taken on his father and the Miles Aircraft Company. It was a privilege for me to sponsor Jeremy to obtain his Freedom of the City of London just as my year as Master finished and he was subsequently clothed in the Livery. Around that time, I discovered that his father, Fred Miles, had been an early Liveryman of the then Guild of Air Pilots, a fact of which Jeremy had been previously unaware.

TOP-SECRET CONTRACT

To quote from the book jacket "blurb": "In December 1943, at the height of World War II, a top-secret contract was awarded to a little-known aircraft company. The contract was to build the world's first supersonic jet, capable of 1,000mph, and the company given this monumental task was Miles Aircraft. The engine was to be provided by Frank Whittle's company, Power Jets."

The story behind this contract, Eric Brown's involvement as the test pilot for the project and the inexplicable cancellation of the project weeks before the prototypes were complete, with the passing of the research to the Americans, is ably set out, supported by a wealth of documentary evidence. At the time of the order to stop

production in 1946, no plausible reasons were given: *Miles M.52* re-examines the reasons put forward and tries to solve the mystery of the cancellation. Eric was able to draw on the knowledge of various key players involved in the project, including the Chief Aerodynamicist, Dennis Bancroft, to enable him to discuss the theories behind the loss of what would have been a world beating achievement for Britain, had it become the first nation to break the sound barrier.

Miles M.52 is a readable and compelling story even nearly 80 years later, and all the more so for the connections with former members and Liverymen of the Air Pilots (GAPAN as it was then). The book is well-illustrated with photographs and carefully set out with over 50 pages of useful appendices, containing much of the supporting evidence behind Eric Brown's thesis. There is also a detailed time-line which assists greatly, and the book is well indexed. Despite the technical detail and intricacies of the project, the story is absolutely clear, and one is left with a huge sense of dismay at the incompetence and unfairness of the protagonists. It is no wonder that Jeremy described his father's reaction as "outrage".

For enthusiasts of aviation history, those fascinated by the history of mismanagement of our aviation industry and for those who have enjoyed the biography and autobiography of this iconic aviator, I commend this book.

Miles M.52 Gateway to Supersonic Flight by Capt Eric Brown, in association with Dennis Bancroft: published by The History Press, 2012, (www.thehistorypress.co.uk) ; ISBN 10: 0752470140 ISBN 13: 9780752470146; hardback and paperback copies still available online. □



The reviewer with the late Jeremy Miles, collecting his Freedom of the City, 2015

INTO THE OVERSHOOT

A round-up of less-formal items which have caught the Editor's eye

AWARD FOR EPTON

PM Wally Epton is this year's recipient of the British Business and General Aviation Association's prestigious Michael Wheatley Award for Outstanding Services to the general aviation industry. BBGA Chair Aoife O'Sullivan presented him with the accolade at the Association's annual conference and AGM on 7th March in front of an audience of 140 plus industry peers. The award citation references his distinguished RAF career (including the BBMF) and subsequent 33 years flying business jets, his 16,400h of commercial flying and contributions to organisations such as the Historic Aircraft Association and BBGA, as well as his Master Air Pilot Certificate. (BBGA) □



CONCORDE AT 50

On 13th February 1974 late Liverymen Brian Trubshaw and Peter Baker conducted the first flight of BAC/Aerospatiale Concorde s/n202, G-BBDG. Fifty years later to the day, Honorary Liveryman HRH Prince Michael of Kent unveiled a new 'portrait' by Simon Attack of the aircraft, now a much-prized exhibit at Brooklands Museum. The Prince later, under the watchful eye of PM Mike Bannister, dipped Delta Golf's nose before spending time flying the Concorde simulator – an experience which will be available to some Company members attending the Master's Garden Party at Brooklands on 30th June. Limited-edition prints of the anniversary painting, signed by a number of Concorde pilots including PM Jock Lowe, being offered at £250 in support of museum funds are available via shopmanager@brooklandsmuseum.com. (Brooklands Museum) □



PWLS UP IN LIGHTS

HMS *Prince of Wales* seems to attract the limelight... After featuring on the cover of *Air Pilot* December 2023 with a stunning sunset shot, now the Company Affiliated Unit has appeared in equally arresting images with a background of the Aurora Borealis, taken during her deployment to Norwegian waters on the NATO exercise *STEADFAST DEFENDER*. (LPhot Belinda Alker, UK MoD, Crown Copyright 2024) □

