



AIR PILOT



INSIDE

TROPHIES & AWARDS

THE TYMMS LECTURE

WINDERMERE'S WATERBIRD





THE HONOURABLE COMPANY OF AIR PILOTS incorporating Air Navigators

PATRON:

His Majesty The King

MASTER:

Capt Robin B Keegan FRAeS

CLERK:

Paul J Tacon BA FCIS

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A Livery Company of the City of London.

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

DIARY



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. With the easing of Covid-19 restrictions, meetings are now held in-person unless otherwise notified.

DECEMBER 2022

7 th	APT/AST	APH
14 th	GP&F	APH
14 th	Carol service	St Michael Cornhill
14 th	Carol service supper	The Factory House

JANUARY 2023

10 th	ACEC	APH
19 th	GP&F	APH
19 th	Court	Cutlers' Hall
24 th	APBF AGM	APH
31 st	Lunch Club	RAF Club

Cover photos: CH-149 Cormorant of 442 (T&R) Sqn, Royal Canadian Air Force, during the rescue which won the unit the 2022 Barry Marsden Memorial Award (Canadian Forces); Waterbird over Windermere (Mark Wright)

Guidelines for submissions to Air Pilot

Please submit contributions as follows:

- Text in word document, including your name below the title of the piece;
- No embedded photos;
- 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.



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A MESSAGE FROM YOUR EDITOR...



Are the needs for more widespread and structured peer support, and a CAA safety notice on the impact of commercial pressures on crew wellbeing, just signs of the times, or are they symptoms of a more deep-rooted failure of corporate culture in the aviation sector?

The sense by air crew of being undervalued, not listened to or subjected to unreasonable pressure inside or outside the cockpit is, of course, not a new phenomenon. Back in the days when such visits were the norm, the Editor's regular invitations to occupy the jump-seat seemed all-too-often less about sharing the joys of the latest bit of tech or relieving the tedium of a long sector by chatting to a visitor than about taking the opportunity to bend the ear of the press on the conditions the crew was enduring, the inadequacy of the airline's management or the failure of airlines and regulators to appreciate the pressures under which crew were operating.

That might have been lightly dismissed as just the typical moaning of a privileged few, although even back then there was enough evidence of failures of respect or communication between senior and junior crew, and between crew and management, leading to incidents and accidents to have inspired responses such as the establishment of CHIRP (40 years ago this year). Now, however, we have the UK regulator feeling the need to issue a safety notice concerning commercial, organisational and client pressure in flight operations, as covered in the DAA's report in this issue. That has been prompted by the CAA's concerns about a rising number of incidents in which such pressures could be seen to be a contributing factor:

The Company is undertaking a variety of initiatives in the area of peer support: not only should these be encouraged, but they deserve to be more widely appreciated by the aviation community – especially by those who are neither aware of the work of the Company nor are members of it, but should be. In an ideal world, of course, there would not be the need for as much peer support as the Company and others are now providing, nor for operator managements to be officially reminded of their responsibilities. There can be no doubt that global issues like the Covid-19 pandemic and the consequences of the war in Ukraine have placed extreme pressures - often existential - on airline managements, but those pressures should not be allowed to override the priorities on safety and wellbeing of those in whose hands lie the safety and wellbeing of those airlines and their customers.

Allan Winn - Editor

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NEWS ROUNDUP



COMPANY VISIT: HOVERCRAFT TO RYDE

By Warden Richie Piper

Pilots like chatting with pilots – hence the Air Pilots hovercraft flight from Southsea to Ryde got off to an excellent start with Capt Paul Grant chatting with members before the flight. A very experienced hovercraft pilot and Master; he has operated and trained people to fly hovercraft around the world and been involved in development and testing of hovercraft.



The Company group with Capt Grant (centre)

In the past hovercraft have been regulated both as maritime vessels and flying vehicles, that was until 1988 when the CAA gave up its regulation of hovercraft and it all came under the Maritime and Coastguard Agency. The Master is still considered to be a pilot as the vessel flies above (the hull normally at a height of 7ft) rather than on the water even though the skirts are still in contact with the surface.

Liveryman John Davy had worked hard to arrange the trip and on the day Liveryman David Curgenvin carried out “sheep herding duties”. Members, including our Master and his lady Eileen, assembled on a sunny morning at Southsea promenade and at the appropriate time, with the minimum of fuss, we boarded the hovercraft that was exclusively ours for the crossing. With a passenger capacity of 80, we had plenty of space as we occupied just over half of the available seats. It later became clear why it was a private charter!

OLDEST OPERATOR

The service is operated by Hovertravel, the oldest hovercraft operator in the world, which started the service with a single-prop turbine British Hovercraft Corp SR.N6 hovercraft number 026 at Southsea on 24th July 1965. It is the only year-round hovercraft service in Europe and as well as passengers, also provides an ambulance link between the Isle of Wight and the mainland.

Capt Grant was keen to show us the capabilities of the Griffon Hoverwork 12000TD we were flying in, promising us close passes of the large lighting arrays that provide guidance to the *Queen Elizabeth* class carriers entering Portsmouth, a circuit of the Spithead Fort and some tight 360° turns before settling the hovercraft into the water to show its ability to float when the lift engines stop. The demonstration proved not only the ability of the hovercraft but also those of its pilot, as it orbited around a very solid Spithead Fort only 15ft away!

Hovertravel currently operates two 12000TDs which are built locally on the River Itchen in Southampton. Paul explained that one of the biggest differences from early commercial



Some familiar controls in the cockpit (pictures, Richie Piper)

hovercraft was the change to diesel from turbine engines. This greatly improved the economy and running costs of operations. The 12000TD uses two 1,100hp (820kW) 24.24l MAN V12 diesels giving a top speed of over 45kt and a payload of 12,000kg. The 12000TD also has built-in ramps and steps which fold out over the skirt for access, obviating the need for ground equipment.

After the flight there was a question-and-answer session, the length of which showed the high levels of interest generated and Captain's willingness to give his time and knowledge to provide answers. This included opening up the engine compartments at the rear of the cabin to show the engines. Many also had the chance to climb the ladder to the cockpit to see the pilot's “office”. Commercial operations also require a member of the crew to act as lookout on the “bridge”, especially when moving at speed through the busy Solent. The lookout's vision is supplemented by radar.

EIGHT RUDDERS

In terms of controlling the hovercraft, once it has risen on the fixed pitch lift fans by opening up the diesels to level required for the load, control is principally in yaw via

the eight rudders behind the two variable-pitch thrust fans. Yaw is controlled either by rudder pedals familiar to any pilot or a side stick which also controls trim. Trim is essential in dealing with load imbalance but also the effects of conditions such as the wind. This is achieved by pumping 1,500l of water between four tanks and, *in extremis*, also moving the fuel about.

One surprise was to learn that hovercraft travel faster on hard surfaces rather than water, because of lower drag. Another was the local council insisted that large vertical metal tubes be installed at the Southsea slipway to ensure

a hovercraft does not “overshoot” onto the public road. Something that has happened in the past!

David then conducted further “sheep herding” to get us all to the Ryde Castle Hotel for a very convivial lunch after which everyone was free and could return to the mainland at a time of their choosing, as we had open tickets. Sadly, Hovertravel’s arrangements didn’t work very well, resulting long waits until it put on an extra flight to clear the backlog. This small issue did not detract from a very enjoyable and well-planned visit, providing a privileged insight into hovercraft operation. □

ST CLEMENT DANES CHURCH 1941 APPEAL

St Clement Danes Church, the Central Church of the Royal Air Force and national Memorial of Remembrance, has launched its ‘1941 Appeal’ to safeguard the future of the Church for generations to come.

In the 1950s, the RAF launched a worldwide fundraising appeal to restore and rebuild the church after the inferno which all but destroyed it on the night of 10th-11th May 1941. Once rebuilt to Sir Christopher Wren’s original designs, the church was reconsecrated on 19th October 1958 in the presence of Her Majesty Queen Elizabeth II as the Central Church of The Royal Air Force. Importantly, the church houses the national Books of Remembrance, with the hand-written names of over 125,000 RAF service personnel who paid the supreme sacrifice whilst protecting the skies.

The RAF is now launching a new worldwide appeal to rebuild the steeple, to open and expand the lower crypt floor to create a ‘well-being’ and education centre and to restore the exterior of the church to its pre-war glory.

The 1941 Appeal is a five-year project with three separate, but distinct, elements as follows:

Pillar One: Restoration of the 1719 James Gibbs Gothic Steeple

This pillar will take 72 weeks and is the most urgent and essential element of the 1941 Appeal.

Costs for this part of the project are c£2million, with plans to start in Autumn/Winter of 2022.

Pillar Two: Expansion of the Crypt to provide a contemporary centre of ‘well-being’

The current Crypt is only one third of the length of the Church. Investigations have indicated a void behind the dividing wall. The vision for Pillar Two is to open the Crypt the full length of the church and develop usable space that will benefit diverse communities.

Pillar Three: Restoration of the Exterior Island

As well as the restoration and modernisation of the structure of the church, Pillar Three will develop the church and the island on which it stands to ensure the exterior is in keeping with local improvements.

Any members of the Company who would like to help, or who would like further detailed information, should see www.stclementdanesraf.org or contact the church’s Development Director at developmentdirector@stclementdanesraf.org or call +44 7305 773 028 to discuss how they might be able to help. □



Steel cables currently hold the steeple together



The Crypt will be opened out into a new space



The island site will be returned to its original form

COMPANY VISIT: THE UXBRIDGE BUNKER

By Assistant Chris McGee

As the number of those who experienced World War 2 grows fewer, the importance of preserving their experiences stays vital, so on a pleasant October morning a group of Air Pilots joined forces with the MagnaMasters (the 2015 group of Livery Company Masters) to explore the eponymous Bunker at Uxbridge in west London.

We were greeted by Operations Manager Lucy Sweet and her colleague Dr Rachael Abbiss BA (Hons) MA, PhD, Military History Curator, and then spent an hour beginning to explore the beautiful exhibition space. Dedicated to the development of the UK's Air Defence System throughout the two World Wars, it was opened in 2016 in the extensive grounds of the ex-RAF Uxbridge and sits right next to the Operations Room of No 11 Fighter Group of Battle of Britain fame. The complex features regularly rotating exhibits highlighting various aspects of the people, technology and events of the time. We were able to explore the role of radar, the Polish air contribution and the WAAF, all topped by a comprehensive display commemorating the 80th anniversary of the Dieppe Raid, an event which we would revisit later in the day.

OPERATIONS ROOM



The plotting table (pics: Chris McGee) We then split into two groups to descend 60ft under the centre into the Operations Room where one of the Exhibitions volunteer docents gave us a comprehensive brief on its role in the Battle of Britain. Controlling the squadrons based in the South-East, it became a crucial element of the "Dowding System" created by Air Chief Marshal of the same name as the world's first integrated air defence system. One keystone was bringing intelligence in from the Observer Corps, early Chain Home radar stations and shipping, both civilian and military, which provided vital detail to the picture plotted on the table and Tote board by the WAAF. Climbing up into one of the control cabins we listened to an audio enactment of a typical engagement with the real-time decision making that won the battle.

Although up to 100 people could be working their 8-10h shifts, being so far underground with a huge blast door ensured their safety. When Churchill visited he was forced to remain sealed inside for the whole period, with no cigars allowed! There was even a Royal box created from



The memorial stone says it all

where the King and Queen could safely observe the action.

DIEPPE RAID

Fortified by a delicious lunch, we assembled in the lecture theatre to be given a fascinating presentation about the Dieppe raid, this being the 80th anniversary of Operation Jubilee. This was the very first Allied combined operation against German forces and was also designed to demonstrate their commitment to open a second western front to take pressure off the Soviet army.

With the objective being to capture the port, infrastructure, radar stations and an airfield some distance away, 6,000 troops landed on the beaches under cover of Fighter Command smoke bombing. Unfortunately this obscured the vision of both sides and soon the tanks shipped in became immobile on the gravel beaches as well. The raid having commenced around dawn, 10h later the order was given for the Allies to withdraw and although it was viewed as a failure, the lessons learned paved the way for the D-Day operations later in the war. The bunker played a crucial role, co-ordinating the RAF fighter and bomber squadrons in their air superiority support to the raid, flying over 2,500 sorties with 1,000 aircraft overall.

We then had the opportunity to revisit the exhibitions and learn even more about this amazing time in our history. Our huge thanks to Lucy, Rachael and all the knowledgeable and enthusiastic team at the Centre. □

LUNCHEON CLUB: SEPTEMBER

By Liveryman Tom Eeles

The 63rd meeting of the Air Pilots' Luncheon Club took place on 21st September; when 62 members sat down in the RAF Club to an excellent meal of steak, mushroom and ale pie served in individual portions, sherry trifle, coffee and petit fours, washed down by Chilean Las Condes Chardonnay and Australian Coorong Estate Shiraz. A minute's silence was held to mark the death of Her Majesty the Queen and the King's health was drunk with the Loyal Toast. The talk after the meal was given by Wing Commander Tony Harper RAF (ret) on Harrier Operations during Operation Corporate in 1982. Tony Harper was at that time a young pilot on No 1 Fighter Squadron, which was deployed to the South Atlantic to operate from the unfamiliar environment of the aircraft carrier HMS Hermes. The squadron's role was expected to be air defence, to act as replacements for the expected Sea Harrier losses which, in the event, did not occur.



Wg Harper discussed No 1 Sqn ops in the Falklands
(© Ministry of Defence)

The squadron reverted to ground attack, a role for which it was well suited and practised. Tony Harper gave a fascinating insight from the viewpoint of a junior officer on his first tour, his memory clearly still sharp of events that occurred 40 years ago.

The 64th meeting will take place on 31st Jan 2023 when Squadron Leader Graham Laurie will talk on the history of The Royal Flight. □

GAZETTE

APPROVED BY THE COURT 17 NOVEMBER 2022

ADMISSIONS

As Upper Freeman

Abdulrasheed Taiye ABIODUN (OS)
Jonathan Mark CHARLTON (OS)
Neil EBBERSON
Julian Michael FORSHAW
Michael Liam James HULL (AUS)
Terry McVENES (NA)
David Eugene OLTORIK (NA)
Laura Marie PRESTON (HK)
Malcolm John SUTHERLAND

As Freeman

Keith James BATTY
Lucy COOPER
Vincent Paul FERGUSON
Andrew James GOODALL (OS)
Oliver Mathew HOLMES
Thomas Michael McNICHOLAS
William Philip Trahair NICOL-GENT
James PALMER

Martin Keith SIMPSON

As Associate

Samuel Ian BELL
Maksim Vincent FERGUSON
Ryan LINEHAN
William McBRETNEY
Lokesh SHARMA
Jonathan MARCHANT

Scholarship Winners 2022

Phoebe Anna BUCKLEY
Frazer CONWAY
William COOPER
Mark GREENWOOD
Elise HAMMOND
Robert Arthur HARRIS
Bradley HILDRETH
Shujaa IMRAN
Meleha KHAN
Grace Mary Elizabeth KRIPGANS
Jacob Henry NELSON
Matilda WATTS
Zak WOLFSON

ACKNOWLEDGED BY THE COURT 17 NOVEMBER 2022

REINSTATEMENT

As Freeman

Jamie William TOWNES

REGRADING

To Livery

Jeff CLEARY
David COLLETT
John DIGGORY
Brendan ROSCOE

As Freeman

Hardik SINGH (NA)

DECEASED

John BARKER
Kenneth BROOKING (NZ)
John BROWNLOW
Michael BUTTERWORTH
Graham JENKINS

John PONSONBY
Anthony STREET (AUS)
Oliver SUMMERELL

RESIGNATIONS

Abigail AUSTIN
Alexander BEATTY
Michael CRONK (OS)
Julian FENTON (OS)
Stuart HULLEY
David MATHERS
Laura McCANN
Peter McGOWAN (OS)
Peter OWEN
Thomas RICH
Anthony SIMONS
Peter WATERS



MASTER'S MESSAGE

By The Master, Capt Robin B Keegan



As is the way for most Masters, this message for the December issue of the magazine is being written in late October, just after the Trophies and Awards Banquet and just before Eileen and I depart for Part Two of the Master's Tour, to Australia

and New Zealand at the beginning of November. The Trophies and Awards Banquet is always a special event in every Master's year and our Editor Allan Winn will be producing a much fuller report elsewhere in the magazine, but I would like to add two things. Firstly, the unsung heroes of the event are our Learned Clerk Paul, Angie, Eloise, Anna and James plus, of course, our Beadle Ted Prior. The office team goes into overdrive in order to produce a splendid evening and they excelled again this year, plus it was pleasing to see a much-increased attendance over last year. Eileen and I would like to place on record our gratitude to all for a brilliant evening.

Secondly, it seemed appropriate to mark the 20th anniversary of Paul Tacon becoming our Learned Clerk, so I contacted his wife Roz to see what she thought he might like. The two suggestions Roz had were to organise a flight in a vintage aircraft for Paul and to ask the Past Masters under whom Paul had served for their views on



PM Epton takes The Clerk flying

working with him. With the kind co-operation of Past Master Wally Epton, Paul got airborne in Wally's Tiger Moth on Saturday 22nd October, and I collated the comments from

Past Masters into a scroll which I had framed. The final gift, kindly donated by Sebastian Pooley, was a commemorative sword engraved with a number of mementos of Paul's life, including the badges of the Army Air Corps and the Honourable Company of Air Pilots. The scroll and sword were presented to Paul and Roz in front of the assembled Company at the T & A on Thursday 27th October - accompanied by a standing ovation.

DON'T IGNORE GLIDING

I had a memorable day out visiting one of the Gliding Scholarship courses held at the Derby and Lancashire

Gliding Club at Camphill which, as well as having modern high-performance gliders, still has a vintage Slingsby T21b Sedbergh glider of the type I would have flown as a teenage ATC Cadet. The enthusiasm and teamwork shown by the scholars was truly infectious and the camaraderie and friendship is something they might not experience on a PPL Scholarship course.

However, it has subsequently become clear that, sadly, we do not get as many applicants as might be expected for the opportunity of a Gliding Scholarship. What is even sadder is that, despite the fact we get hundreds of applicants for our PPL Scholarships, it seems very few of those PPL applicants wish to be considered for a Gliding Scholarship if they are unsuccessful in gaining a PPL one. It is not clear why this should be. Perhaps they think that agreeing to be considered for a Gliding Scholarship might harm their chances of gaining a PPL Scholarship? Nothing could be further from the truth!



Gliding scholars at Camphill

In fact, we have had gliding scholars who have subsequently been successful in becoming PPL scholars, and gliding experience gives some of the best grounding in basic 'stick and rudder' flying which will always stand scholars in good stead for any future flying training. If you have any contact with potential applicants, please persuade them to consider a gliding scholarship as well as a PPL scholarship otherwise they could miss out on this fantastic opportunity. Applications for both will be opening on the website in the New Year.

We are approaching the Festive Season and one of the highlights for Eileen and me is the Company Carol Service held at St Michael's Church, Cornhill. The choir at the church sing beautifully and the atmosphere is magical. This year the service is being held on Wednesday 14th December at 18:00. Do try and come - you won't be disappointed! So, all that remains is on behalf of Eileen and me, to wish you and yours a very Merry Christmas and a Happy, Peaceful and Prosperous New Year.

Safe Aviating.

□

REGIONAL REPORTS



Australia

By Liveryman Spencer Ferrier, Australia Region Chairman



There have been two major events for the Honourable Company's Australian Region since our last antipodean note. We have attended at the valuable and most informative "Safeskies" conference, held at Canberra ACT; and attended at the Australian Aviation Hall of Fame ceremony to see four people inducted.



Safeskies VIPs include Australia Region Chairman Spencer Ferrier (2nd left) and event chair Peter Raven (far right)

The Safeskies Conference introduced by its Chairman, Liveryman Capt Peter Raven, is an internationally recognized conference directed at

improving and increasing safety in all of the major sectors of the aviation industry. This year the emphasis was on the development of that part of the industry that can be broadly categorized as 'Drones,' which are developing rapidly in conjunction with lightweight electric power and improved battery power and weight.

The opening event was the Sir Reginald Ansett Memorial Lecture, presented by Andre Stein, CEO of Eve Air Mobility, pointing to Australia's expectation of substantial orders of automatic flight aircraft to transit from



Sir Reginald Ansett Memorial Lecturer André Stein

airports to city centres. This was enhanced by the incisive P G Taylor Address presented electronically by Air Chief Marshal (ret) Mark Binskin AC as Chair of the Civil Aviation Safety Authority (CASA), who reviewed the efflorescence of enterprise, innovation, manufacturing and in essence, the development of CASA regulation.

The first day was an outstanding success, strongly attended by participants from all sections of the industry. The second day was postponed by the intervening announcement by our Prime Minister of a National Day of Remembrance for Her Majesty Queen Elizabeth II. The intended presentations were due to be published electronically in mid-November.

It was notable to observe the close interest shown in UAV subjects by those in the room: the Conference Hall remained full for the whole day, a clear sign of the importance of the development of this part of the industry and the personal involvement of those present.

HALL OF FAME

The Australian Aviation Hall of Fame ceremony saw four inductions at a convivial dinner at Shellharbour, south of Sydney, NSW.

Capt Deborah Jane Lawrie AM for her trailblazing and standard-bearing role for women in aviation.

John Weymouth, a lifetime Helicopter national pioneer for search and rescue, fire fighting, mustering, commerce, training and infrastructure.

Sir Richard Williams KBE, CB, DSO, [1890 – 1980] (acknowledged as the "father" of the Royal Australian Air Force) was inducted. His family accepted the award with a most gracious speech of acceptance.

Basil South Brown, co-founder of the regional airline East-West Airlines and for his contribution to the agricultural flying industry



Hall of Fame inductees Deborah Lawrie and Sir Richard Williams

The Australian Helicopter Industry Association and The Aerial Application Association of Australia were granted the Southern Cross Award in recognition of their significant contributions to the firefighting effort during Australia's devastating bush fires.

As I write we are looking forward to greeting the Master of the Honourable Company upon his arrival upon his Australian Tour commencing in November where he will be greeted by Members in Sydney, Adelaide, Canberra, Brisbane, and Melbourne, before departing to Auckland, New Zealand. □





Regional Report: North America

By North America Region Chairman, Liveryman Simon Lawrence

The North America Region started the year with the uncertainty of Covid-19 but was able to move forward and by summer's end had hosted a successful tour for the Master and his Consort.

As for aviation in general, the airlines in Canada and the US bounced back from 2021 with heavy passenger loads, record profits and good bookings into the fall and winter seasons, but many operational issues. Business aviation continued to do well with limited numbers of business aircraft available in the inventory and record numbers of charter flights flown, particularly in the Florida region. This in turn resulted in the FAA organizing an industry meeting to discuss how all parties affected could work together to manage better the crowded airspace. General aviation also experienced a high demand throughout 2022.

While returning to pre-Covid-19 levels has been the aviation marker to strive towards, the big elephant in the room continues to be the issue of "person power." Whether it be pilots, flight attendants, mechanics (engineers), ramp personnel or air traffic controllers, depending on which organization you talk with, there may or may not be a shortage in the North America Region. While major airlines report they can fill their employee positions, the further you get from the highest-paying aviation jobs the more job openings aviation companies seem to have available.

THE 1,500H RULE

For pilots in the US, one of the obstacles to a top-paying airline job is the so called "1,500-hour rule." In simple terms, the FAA 1,500-hour rule specifies that a pilot must accrue 1,500h total flight time before being granted an Airline Transport Pilot Licence. There are some exceptions to this rule but for most, the rule applies. Prior to this rule it was possible to be hired as a First Officer for a regional jet with only an FAA Commercial Licence and 250h of flight time.

I recently spoke with a young pilot who is one of those to whom this rule applies, and who is working hard in the business of aerial advertising (banner towing) to reach his goal of 1,500h and the possible shot of an airline career. Andrew Chappell works as a pilot for OBX Airplanes at the Manteo, NC airport, on Roanoke Island, North Carolina. The operation includes eight aircraft: two Cessna 172s; two Cessna 182s; three American Champion Citabrias; and a pristine 1999 Waco biplane used only for sightseeing flights. During the peak summer months when

thousands populate the local beaches, OBX Airplanes can expand to as many as nine or 10 pilots. The company looks for pilots with tailwheel endorsements and high-performance signoffs who will not only tow banners but also give flight instruction, if they hold a CFI rating, and provide sightseeing flights, all within 25 miles of the Manteo airport. Its pilots can expect to fly anywhere from 700 to 1,000/year.

Andrew started flying in 2019 and so far has accumulated 500h of general aviation flying. He obtained a university degree in Aviation Management and he showed me around the facilities explaining the process it takes to get a banner in the air.

TOW-STARTING

It takes roughly 30min to build the banner, which is laid out on a jig that can hold the entire message as the letters are attached in a page-by-page book fashion. Once the banner is complete it is attached to a pole, which is then attached to a rope with a loop. The banner is then laid out next to the runway: two large stakes are set up and a rope connected to the banner is laid out across the stakes. The pilot then flies the aircraft down at such an



Building hours: Andrew Chappell with an OBX tow-plane

angle as to snag the rope with a trailing hook behind the aircraft. Once safely hooked, the banner unfolds as it is pulled into the air.

Often the question comes

up about how can single-pilot banner-towing flight time relate to multi-crew airline flying. The 1,500-hour rule, however, does not differentiate in the type of flying a pilot must have to meet the requirements (although it does require 50h of multi-engine time). In talking with Andrew, I was impressed with his knowledge of CRM, safety issues, cockpit checklist usage and crew concepts. Obviously, he had received excellent training from his university and his employer despite his rather different form of time accumulation. As for his goal of getting an airline front seat, I am pretty sure he will eventually reach it. It is just going to take at least 1,500h. □

Regional Report: Hong Kong

By Liveryman Valerie Stait, Chairman, Hong Kong Region



While Hong Kong moves slowly from Covid-19 restrictions, albeit in the right direction, I caught up with someone who has made the most of the downtime. Developing young people is a core tenet of the Air Pilots. However, some choose to expand on their professional development later

in their careers. Upper Freeman Darren Palmer shared why he chose to do an MSc as a mature student when he already has a perfectly good job.

Darren's early career started in with an undergraduate degree in Air Transport with commercial pilot training. He then towed gliders to build hours and has been with his current airline 10 years, working in risk and safety management for Flight Operations alongside flying the Airbus A330/A350. Despite this, he found himself asking: "Now what?" He was looking for continued development, both personally and professionally.

Darren decided to pursue an MSc in Aviation Human factors through Coventry University. The course is all online, so allows him to work around his day job and has a proven track record. Human Factors interested him as he wanted to understand what makes people tick and what motivates them. Through the course, he is learning what happens when you add people into a technical system such as a flight deck. Darren underlines the importance of taking a holistic view of what drives human behaviour on a daily basis. Taking wider performance shaping factors into account is where it gets interesting for him: the combinations behind decision making, learning and information processing.

FOCUS ON TRAINING

As Darren is a Type Rating Instructor (TRI) on the Airbus, one area he particularly enjoys is training and training design, looking into where the sticking points are likely to be and the best ways to manage these. From a performance point of view, his study has helped him understand what creates good performance as opposed to what is just good enough. He mentions the importance of task analysis to see how ideas work in the real world: the difference between work as imagined versus work as done. This would involve areas such as training simulation, simulator fidelity and design of training packages. To be effective, learning also needs to put the human at the centre. The course has given Darren a deep understanding

of how and why training courses are put together as well as adult learning. He finds delivery of training to adults and teaching people of different ages an interesting proposition. Adults don't need you telling them how things work, he explains. They learn effectively through their own exploration of the issues.

I asked Darren what he has got out of the course so far. He feels the degree has deepened his understanding and that has made him more cognisant of what's going on in the flight deck. This includes an awareness of people, such as effects of fatigue or stress in others and how he communicates. It is interesting to see how decisions are made and implemented. This is not just things that may be assumed or overlooked by crew, but also what they are doing well. This has made him less judgemental, approaching safety from a viewpoint of curiosity without judgement, something he also applies to himself. Another benefit is the skills he now has to understand the operation. The statistics modules allow him to evaluate and implement data-driven solutions. He finds it satisfying to see a project through from start to finish.

In hindsight, Darren would have done a Master's earlier, though acknowledges it is a significant commitment and you need the time and opportunity to undertake it. How has he managed it around a full-time job? He replies that you make the time, by hook or by crook. The course continually forces him to read widely around the profession to explore new interests. He wants to use his thesis to contribute to knowledge that's relevant with real-world, practical applications for the industry. Clearly, you have to be very self-motivated and disciplined to make a course at this level work. That said, Darren does think pilots are well-suited to continual learning and the sense of achievement that brings, whether that be early or later in their careers.



Darren Palmer and HK Chair Valerie Stait at a recent IATA conference



Regional Report: New Zealand

By Liveryman Mike Zaytsoff, Technical Director, NZ Region

On 20th October the New Zealand Government dropped the final Covid-19--induced travel requirement – a Traveller Declaration - for entering the country. This followed shortly behind the abandonment of requirements to provide a negative test, proof of vaccination status, and travel details for contact tracing purposes, in order to enter New Zealand. If ever there was a final signal of the change from eradicating Covid-19 to mitigating Covid-19, it came with that October announcement.

Covid-19's stranglehold on aviation in this part of the world was over. We all know very little good came during the pandemic - particularly to those who lost loved ones, and my sincere condolences to them for that. It caused me to think, however, of the couple of good things that did happen during the pandemic that now disappeared with the restrictions.

TRANSITION TO PROPS

If there's one thing about Kiwis, they LOVE to travel. When the international border was closed, Kiwis still maintained their travel habits; they just did it domestically. Air New Zealand's ATR 72-600 turboprop fleet was running domestically at 106% of pre-Covid-19 flight levels while the international border was shut. This problem



ATR fleet gave Air New Zealand's turboprop and jet crews opportunities to work together while borders were closed

begat a novel solution. We were short of pilots and flight attendants at the regional/turboprop level, while our international jet pilots and flight attendants couldn't wait to get back to work. So the representative parties collaborated to form an agreement whereby international jet pilots were used to supplement the ranks of regional turboprop pilots. It wasn't an easy process, as both were governed by different union contracts. But where there's a will, there's a way.

On a personal level, being a Bombardier Dash 8 pilot, I was at first apprehensive about potentially having a long-time, senior Airbus Captain as my First Officer. I wondered if there would be friction or resentment at being removed from a modern, high-performance aircraft

to a 1980s-vintage regional turboprop, thrashing away in icing and turbulence. To my pleasant surprise, however, my jet colleagues were some of the finest and most professional flight crew I've ever worked with in the last 23 years. I had one with me as FO for my six-month simulator check. No matter what the simulator instructor threw at us, I don't think it raised my jet colleague's blood pressure one iota. It's great working with people who have such calm grace under fire. For a guy like me who still gets the occasional bout of check-itis/sim-itis, it makes a big difference.

Another one of my jet colleagues told me they wanted to fly the regional turboprops because they had never before flown one. How could that be? I thought. Having finished flight school, this pilot had gone straight into an Airbus A320 cadet programme and had only ever flown A320s. They were resigned to the fact they might never fly a turboprop so jumped at the opportunity for a short-term transfer to the regional propeller fleet.

FIRST CLASS SERVICE

As for the flight attendants, several came directly from the First Class cabins of our widebody international aircraft. The funniest thing was they treated the regional turboprop cabin as if it was First Class on the B777! I recall one flight attendant reciting the names of every single passenger she bid farewell to as they disembarked -all this on a 39min flight, as the only flight attendant on board! On that note, a few jet flight attendants told me they liked working on the turboprops because they actually got to use the PA and make announcements to the passengers. Initially surprised, I soon learned that on the international jet fleet it's quite restrictive over which flight attendants get to make announcements over the PA system.

Another couple of jet flight attendants told me they liked working on the turboprops because they actually got to interact with the pilots. On the widebody international aircraft, if they were working in the back cabin, they might never talk to the pilots during the entire 12, 14, or 16 hours of a flight.

Alas, all good things come to an end and my jet colleagues have now returned whence they originally came. That's OK: I still work with some really great people. I can say I will NOT miss the Covid-19 restrictions and lockdowns - but I will sure miss getting to work with my international jet colleagues. □



REPORT: YOUNG AIR PILOTS

By Freeman Dom Registe, Chairman, Young Air Pilots

As we approach the end of the calendar year, reflection and planning ahead are often the order of the day. In an industry as fast-paced and dynamic as aviation, however, the aforementioned are almost in constant use. While we are still focussed on transitioning from one of the most challenging periods in aviation, it is reassuring to see that industry projections are encouraging.

A positive outlook was very much the overriding sentiment of industry professionals in attendance at Pilot Careers Live in early November, as evidenced by the notable increase in pilot recruitment and re-opening of prestigious airline schemes. The influx of prospective pilots and aviation enthusiasts echoed the mood, and the volume of foot-traffic far exceeded what was presaged by a well-attended Pilot Careers Live event earlier on in the year.

As always, the Air Pilots stand was in prime position to provide the impartial and considered guidance that so often aids the next generation of aviators. Always looking for innovative ways to enhance the Company's standing, we had Assistant Steve Durrell's new promotional banners informatively framing what was a large and enthusiastic team of Air Pilots volunteers. Needless to say, the team was in demand for the whole day and in addition to the wealth of experience on offer, the Company's battery of aptitude testing provided a practical insight into the role so many were hoping to occupy in the future. Outreach events such as these always prove to be the most rewarding of days for all involved, and Pilot Careers Live remains a personal favourite for this reason alone. Thank you once again to all of those in attendance (some of whom will now be reading this as new Company members!) and I look forward to meeting even more Young Air Pilots on stand in the very near future.

SOCIABLE SETTING

Recent months have also afforded the opportunity to meet a large number of company members in a more sociable setting. Early October saw the launch of the inaugural YAP Scholars Summer BBQ & Fly-in. Hosted at



The Young Air Pilots barbecue

West London Aero Club, White Waltham, it was designed to unite company scholars across the scholarship spectrum and from all years, alongside the

usual strong turnout of Young Air Pilots and Company members. With the request for good weather kindly granted, the day exceeding expectations on all fronts. With scholars ranging from 'skill test passed days ago' to Chief Pilot Technical, the range of experience was breath-taking and is an overwhelming testament to the scholarship programme of years ago as well as today. All in attendance had much in common and with many stories and experiences to share, the supply of conversation far surpassed even the strong supply of hotdogs and burgers on offer.

Those in attendance were also treated to an incredibly rare walk-around of the world's only two-seat Hawker Hurricane (BE505), as well as the North American Harvard, based at White Waltham.

Needless to say, and unsurprisingly, it is a visit I still hear



Young Air Pilots at the T&A

about from members to this day and a special thanks goes to Hurricane Heritage and the team for being so accommodating and making it all possible.

INCREDIBLE ACHIEVEMENTS

The month of October also saw the Trophies & Awards Banquet, held in the Great Hall of Guildhall, London.

The surrounding grandeur, traditional formalities and attentive audience proved to be a more than apt setting for the incredible achievements of each award recipient. Never have Young Air Pilots been so prominent on such a prestigious stage: **Zara Rutherford**, the youngest woman to circumnavigate the world in a microlight (The Master's Medal); **Mack Rutherford**, the youngest pilot to circumnavigate the globe (The Master's Medal); **Travis Ludlow**, solo around the world record breaker (The Grand Master's Medal); **Alexander El Khawaja**, the most meritorious student pilot (The Glover Trophy); and **William Cooper**, the outstanding Company PPL scholar of the year (The John Landymore Trophy). Their achievements are detailed elsewhere in this issue and on the Company website.

It has been a privilege to be the Young Air Pilots Chair during this period and witness the historic moments amongst you. On behalf of the entire committee, I wish you all the best and safe flight into the new year. □





FROM THE DESK OF THE DAA

By IPM Nick Goodwyn, DAA

FOCUSING ON FLIGHTCREW HEALTH AND WELLBEING

The Royal Aeronautical Society hosted the 2022 International Pilot Peer Assistance Coalition (IPPAC) Conference over three days in early November, focusing on flightcrew health and wellbeing.

IPPAC is a non-profit entity whose goal is to promote pilot mental fitness and psychological well-being throughout the USA and, increasingly Europe, the UK and the international aviation industry, and to assist organisations holding air operators' certificates looking to develop robust pilot-assist programmes. In addition, the coalition seeks to increase expertise in this area through an annual conference, where representatives from regulators and leading aviation mental health experts are invited to speak on the latest developments in this field.

This year's conference brought together over 100 delegates and speakers from operators, regulators, academics, aircrew medical examiners and mental health professionals from the UK, Europe, the US, Australia, New Zealand and with a delegation from Japan, which is the most recent national aviation authority to support the introduction of pilot peer assistance. I presented and moderated a panel discussion of regulators including the UK CAA, the FAA, ICAO, EASA and the Japan Civil Aviation Board.



IPPAC delegates gather at the RAeS

The backdrop to highlighting this subject and the interest of the Air Pilots has been influenced by the development of regulation which has mandated all operators to implement a Support Programme for flight crew designed to inform and educate pilots on their wellbeing and health (through EASA in 2020 and then in the UK in February 2022). This arose from the German Wings accident of March 2015 and the subsequent EASA Task Force review and findings that recommended the implementation of pilot support and reporting systems.

The UK introduced equivalent regulation this year, as **Cat.Gen.MPA.215 Support Programme**, which states: *"The operator shall enable, facilitate and ensure access to*

a proactive and non-punitive support programme that will assist and support flight crew in recognising, coping with, and overcoming any problem which might negatively affect their ability to safely exercise the privileges of their licence. Such access shall be made available to all flight crew."

The intent of a Support Programme and the use of Pilot Peer Assistance is to positively promote and support the whole health and wellbeing of commercial flightcrew, providing confidential and independent peer-based support and assistance. At the heart of the initiative are trained peer volunteers, working with the oversight of qualified health professionals to enhance the wellbeing of industry personnel, preserving careers and enhancing aviation safety. A further opportunity is that this concept could be used as a template to develop the creation of similar programmes to provide equivalent oversight for other safety critical aviation personnel.

The use of 'pilot peers' is encompassed by guidance on the principles governing a proactive Support Programme, applying the principles of 'just culture', whereby the senior management of the operator, mental health professionals, **trained peers** and, in many cases, representative organisations of crew members work together to enable self-declaration, referral, advice, counselling and/or treatment, where necessary, in case of a decrease in medical fitness. Access to a programme should: a) Enable self-declaration or referral in case of a decrease in a flight crew's medical fitness with an emphasis on prevention and early support; and b) If appropriate, allow the flight crew to receive temporary relief from flight duties and be referred to professional advice;

The Covid-19 pandemic and subsequent return to a new normal of operational commercial air transport tempo has raised significant challenges to flightcrew mental health and wellbeing, the outcomes of which will be emergent for some time to come. Commercial pressure on operators and the need to understand and balance those pressures with the needs and wellbeing of their flightcrew workforce is paramount and was raised recently in a UK CAA Safety Notice **SN-2022/005**

Commercial, Organisational and Client Pressure in Flight Operations.

The aim of the Safety Notice was: "...to highlight commercial, organisational and client pressure (hereafter referred to as commercial pressure) which has been highlighted as a contributing factor to a number of aircraft



Peer support for aircrew is vital (iStock)

incidents. Whether perceived or actual, this pressure can have a detrimental impact on key operational decisions, particularly in marginal conditions... The financial challenges that some

operators have experienced because of the Covid-19 pandemic may increase the likelihood of commercial pressure being felt by operating crew members."

The Air Pilots established a Peer Support Programme available to members and accessed through our website and recently, as DAA, I provided some of our Hong Kong members with a day of virtual Peer assistance awareness training as part of an ongoing programme of support. A more in-depth analysis of pilot peer assistance and support to flightcrew health and wellbeing will be provided in future editions of *Air Pilot*.

AIRSPACE MODERNISATION CONSULTATION

In May, I reported that Warden Richie Piper, Tech Group lead on Airspace, delivered to Aviation Minister Robert Courts MP and representatives from the Department for Transport a brief on the Air Pilots TG Airspace Modernisation Strategy paper and the Air Pilot's response to the UK CAA consultation on a draft Airspace Modernisation Strategy 2022-2040. The UK CAA has just published the outcomes of that consultation and its overall approach to the refresh of the Airspace Modernisation Strategy (AMS).

The CAA has concluded that it should make no fundamental change to its overall approach, and stated that the responses had helped focus the future direction of travel on specific areas where more work is identified as needed.

When we met with the then Aviation Minister, it was apparent that there was little or no appetite at DfT to consider wholesale changes to airspace modernisation or innovative design and future funding options, despite the Air Pilots identifying that such an approach would positively enhance the opportunity to achieve government environmental challenges and net zero carbon emission targets. The DfT position is widely reflected in the consultation outcomes.

The CAA review document notes that the draft AMS kept as its vision: "Deliver quicker, quieter and cleaner journeys and more capacity for the benefit of those who use and are affected by UK airspace", structured around four strategic objectives: 1) Maintain and enhance high aviation safety standards; 2) Integration of diverse users and meet defence/security needs; 3) Simplification –

reduce complexity and improve efficiency; 4) Sustainability – delivering the government's key environmental objectives with respect to air navigation.

It was noted in the review that the CAA has introduced sustainability as an overarching principle to be applied through all modernisation activities, taking account of the latest government policy and environmental guidance, including better managing noise and helping achieve government commitments to net zero emissions. Also of note, and reflecting the UK as a National Aviation Authority independent of EASA, is that the AMS would be used to assist in the development and prioritisation of UK airspace rulemaking activity (policy and legislation) to help ensure the timely and coordinated implementation of modernisation initiatives.

The CAA received feedback about its overall approach through 114 responses, of which the Air Pilots was one: 54 (47.5%) said it was about right or only minor modifications were needed; 45 (39.5%) said major modifications were needed; and 15 (13%) didn't know or chose not to answer the question. Of interest, the CAA noted that those from the General Aviation community were principally concerned with airspace access and that the CAA was not properly taking into account the needs of non-commercial aviation, or the outcome of past CAA airspace change decisions (which were out of scope of the consultation).

The CAA has identified five areas where it has concluded that more work is needed: 1) Demonstrating how environmental sustainability will be treated as an overarching principle, in line with the CAA Environmental Sustainability Strategy; 2) How to/who will deliver and deploy key aspects of airspace modernisation, including the role of ACOG, NATS and airports; 3) Governance and leadership of the modernisation programme; 4) Funding and resourcing the broader modernisation programme envisaged by the refreshed AMS; and 5) Improving the General Aviation community's perception of modernisation concepts.

The link to the CAA CAPS Outcome of the consultation is:

<https://publicapps.caa.co.uk/docs/33/CAP2404%20AMS%20CRD.pdf>

FINALLY

In the UK, we are experiencing something that has never happened before as Magnetic North, True North and Grid North align over Great Britain. □

A unique alignment of Norths



THE 2022 TROPHIES & AWARDS BANQUET

Some 530 Members and guests of the Company attended the annual T&A Banquet at London's Guildhall on 27th October. The Principal Guest was Prof Anu Ojha OBE, Director of the UK National Space Agency, who formally presented the Master with a copy of the John Gillespie Magee poem *High Flight* which has flown to the International Space Station. Other guests included the Master Engineer, the Master Insurer, the Master Master Mariner and the Chief of Staff (Air). At a Court meeting before the Banquet, eight new Liverymen were clothed, and four Master Air Pilots received their certificates. After the Trophies and Awards had been presented, the Master made a special presentation of a ceremonial sword and illuminated scroll to the Learned Clerk, Paul Tacon, to mark 20 years of service to the Company. (All pictures: Gerald Sharp Photography)



The Master with new Liverymen (L to R) Capt Mark McCullins CD, Capt Simon Lewis, Wg Cdr Gareth Cunningham, Flt Lt Guy Story, Flt Lt Kyle Thomas, Capt David Collett, Capt John Diggory, Flt Lt Brendan Roscoe



The Master with new Master Air Pilots (L to R) Capt John Gissing, Grp Capt Terry Holloway, Cdr Richard Sutton MBE and Maj Matthew Roberts AAC



The Master and his Principal Guests (L to R) Mrs Geraldine Dunlop; Master Insurer Mr Nick Dunlop; Master Master Mariner Captain Robin Batt; Prof Anu Ojha OBE; The Master; The Master's Consort; Master Engineer Mrs Audrey Canning; Mr John Canning; The Clerk; The Beadle



The Company gathers



Unexpected giraffe in the Banqueting area – Geoffrey, who raises money for Great Ormond Street Hospital and has flown with many Company members, attended with Assistant Steve Bridgewater and wife Nia



Associates Zara and Mack Rutherford receive their Master's Medals



Assistant Seb Pooley accepts the Sword of Honour on behalf of PM Robert Pooley



Air Astana crew (The Hugh Gordon-Burge Memorial Award)



No 442 Sqn Royal Canadian Air Force (The Barry Marsden Memorial Award)



Crew of Rescue 151 (The Prince Philip Helicopter Rescue Award)



The Clerk, with wife Roz, receives his special 20-years'-service presentation from The Master



Prof Ojah presents the space-flown copy of High Flight to The Master

THE TROPHIES & AWARDS 2022

The Company's Trophies and Awards for 2022 were awarded at the annual T&A Banquet, held at the Guildhall in London on Thursday 27th October.



FOR OUTSTANDING COURAGE OR DEVOTION TO DUTY IN THE AIR



THE GRAND MASTER'S AWARD SQUADRON LDR MARK PARKER

When the hastily-organised evacuation of Afghanistan was announced in September 2021, Sqn Ldr

Parker departed the UK with his crew to lead the No LXX Squadron detachment of Airbus A400M Atlas. On arrival in Dubai, it became clear that the assumption of a benign evacuation had been overtaken by the collapse of the Afghan government, and that the whole plan had to be revised, which Parker accomplished in 36h.

On arrival, the Afghan capital had been overrun and the airport was collapsing with an aircraft being abandoned on the runway in flames ahead of them. Having held off, and at below minimum fuel, Parker had to do a go-around from 200ft after a convoy of vehicles entered the runway, and landed after a shortened, visual, manoeuvre. After offloading his mission-critical troops, Parker managed to source some of the last available fuel, but on departure the aircraft was bracketed by artillery and mortar fire, and he had to reposition and wait until helicopter gunships were able to provide covering fire.

Under intense operational and emotional pressure, Parker showed unwavering courage under fire, using exceptional airmanship and flying skill to successfully achieve his rescue mission while safeguarding his passengers and crew.

THE MASTER'S COMMENDATION



MAJOR TERRY CAMPBELL

Maj Terry Campbell joined the Army Air Corps in 1983 as a junior leader, completing the Army Pilot Course in 1992 and becoming a Qualified Helicopter Instructor (QHI) in 2000. He has amassed over 6,300h on the Squirrel,

Gazelle, Lynx, Apache and most recently, Bell 212. His extremely varied career included operational tours of Northern Ireland, Kosovo, Bosnia, Iraq and Afghanistan, eventually becoming Lead Army Aviation Standards

Officer to the UK Apache Force.

Major Campbell initially flew the Gazelle and, for a short while, the Lynx in frontline Squadrons in the newly formed 16 Air Assault Brigade. He was pivotal in developing Air Manoeuvre doctrine and deployed on many operational tours flying the Gazelle in the Counter-Terrorism role over Belfast and chasing down Balkan War criminals.

Maj Campbell was at the forefront of the introduction of the Agusta-Westland AH-64D Apache into British Army service, initially training on the AH-64A model in the US and then as one of the first UK instructors on the UK Apache delivery programme.

His current tour is as the sole QHI of a detached Squadron in Brunei delivering Jungle Aviation to a wide variety of special users

THE MASTER'S MEDAL



ASSOCIATE ZARA RUTHERFORD

In August 2021 Zara completed a solo Round-the-World flight in a Shark microlight. Because of the microlight categorisation, this had to

be completed in day VFR conditions only. Although now living in Belgium, she learnt to fly in the UK at Blackbushe aerodrome and is a member of the Honourable Company.

At the age of 19 she was the youngest woman to complete this feat (beating the previous record holder by 12 years) and also the youngest woman to circumnavigate the world in a microlight.

During her record attempt Zara completed flights over water of up to eight hours and had to descend to 600ft over the sea, in order to avoid thunderstorms in Indonesia. Zara demonstrated the tenacity to overcome many obstacles which might have deterred others. She was stranded due to weather for three weeks in Russia, with temperatures as low as -35°C and in a small town of 800 people, none of whom spoke English, and she spoke no Russian. Also, the global Covid-19 pandemic added further restrictions and bureaucracy, and obliged her to use a less-than-optimum route.

Throughout the trip Zara encouraged girls she met to consider wider career options and the study of STEM subjects. During interviews, Zara exhibits charming and modest conduct. Zara hopes to go to university to study computer science and computer engineering, but her dream goal would be to become an astronaut.

THE MASTER'S MEDAL



ASSOCIATE MACK RUTHERFORD

Mack Rutherford is the youngest pilot to circumnavigate the globe, at 17 years, 2 months and 2 days. The flight lasted 142 days from

23rd March to 24th August 2022 with many delays due to bureaucracy, and further aggravated by the need of additional permissions and clearances because of his age and the microlight status of the Shark aircraft. His journey, visiting four continents and 30 different countries, covered 29,225nm (54,124km).

Mack was solo and self-supporting for the entire period, although assisted by a capable, remote flight planning and monitoring team. The most challenging leg was from Japan to Anchorage Alaska which involved flying approximately 10h non-stop, over open water, from Japan in a single engined aircraft, to a landing and overnight stay on the totally uninhabited Aleutian Island of Attu.

Mack has now officially broken two Guinness World Records: youngest person to fly around the world solo; and youngest person to fly around the world solo in an ultra-light aircraft - previous record holder, his sister Zara.

THE HUGH GORDON-BURGE MEMORIAL AWARD



CREW OF AIR ASTANA EMBRAER 190: CAPT VYACHESLAV AUSHEV, FO BAUYRZHAN KARASHOLAKOV, AND SAFETY PILOT FO SERGEY SOKOLOV

A standard airline crew was tasked with recovering an Air Astana Embraer 190 after a Check C in Portugal to the

home base of Air Astana in Almaty, Kazakhstan, via Minsk in Belarus. Some 10sec after a contaminated runway takeoff, which required extra flap, small, unexpected oscillations in roll alerted the crew to a problem. The oscillations gradually built up, but the aircraft continued to climb (full thrust already selected), but the aircraft was effectively uncontrollable.

The fact that the flight control software had been reloaded led to the initial conclusion that this was the issue, but selecting the autopilot failed to correct the problem. With each action being confirmed first with the Safety Pilot, the flaps were incrementally raised (Flaps 1 proved best) and control channels were selectively checked. With the aircraft effectively out of control, and in cloud, it was decided to climb into VMC and then head out to sea for a ditching.

Two Portuguese Air Force Lockheed-Martin F-16s were despatched to help to navigate to the sea: their initial approach provoking the E-190's TCAS into a violent reaction. A review of the C check records now turned up "Aileron Cables Changed", and a visual check quickly confirmed that they were cross-connected. Armed with that knowledge, the crew decided to try to divert to the military air base of Beja, with the F-16s leading. During the descent on finals the aircraft started rolling again as the natural reversion to traditional control inputs cut in. After a go-around, Capt Aushev, realising that he was more physically fatigued than his two colleagues, handed over control of the aircraft to FO Solokov, the Safety Pilot. After a second go-around following a further unstable approach, it was decided to use only rudder for directional control during a three-mile short final to touchdown, which was made on a former taxiway as it was most direct in front of the Embraer.

THE PRINCE PHILIP HELICOPTER RESCUE AWARD



CREW OF RESCUE 151: ROBERT GREEN, CAPTAIN; SIMON HANCOCK, CO-PILOT; DUNCAN TRIPP, WINCHMAN; PHILIP CAUDLE, WINCH OPERATOR

On 8th March 2022, the Inverness SAR crew, Rescue 151 (R151), and its Leonardo AW-189 helicopter, was tasked to an incident on Ben Nevis, where a climber had fallen at 3,600ft. R151 arrived on scene at 15:10, but successive attempts in winds above 60kt with severe turbulence proved a safe winching

position or low hover was impossible. R151 landed at Halfway Lochan (1,870ft) and the Winchman began his ascent whilst R151 moved to deploy Lochaber Mountain Rescue Team (MRT) personnel.

The Winchman soon met four people who confirmed one deceased and two injured, one with a broken leg, and another group of eight, higher up, who were struggling. Faced with multiple casualties with unknown injuries, a Major Incident was declared, and additional MRT and another SAR helicopter were requested. R151 remained airborne as on-scene commander, providing the essential communications link between the Winchman (in cloud), MRT, the MRT base and UK Rescue.

The larger group was found exhausted and barely moving. Only one, a British Army sergeant, had an ice axe and crampons: he confirmed there were two crag fast walkers, the companions of the deceased, at the top of Red Burn Gully. The Winchman, having spotted MRT approaching the fallen casualty, now focussed with the sergeant's help on the crag fast walkers. With the help of a second helicopter, R199, a total of 32 MRT were deployed before night fell and R199 returned to Prestwick.

Despite high winds and visibility below 20m, the Winchman eventually located the traumatised casualties, and escorted them across a 20m, >20° ice-covered slope and with help from the Sergeant led them onto a 30cm-wide snow-covered path, from which he was blown at one stage.

R151 exploited a short weather window to extract two groups, including the stretcher casualty with a broken leg. A third extraction was aborted because of the conditions: the remaining casualties were walked off the mountain, and the deceased and the Winchman were recovered using the MRT's soft track vehicle. The crew of R151 finally reunited at Torlundy before returning to Inverness at 22:20, 8h after the initial tasking, having helped rescue 24 casualties.

THE BARRY MARSDEN MEMORIAL AWARD



442 (T&R) SQUADRON ROYAL CANADIAN AIR FORCE

On 15 November 2021, 442 Transport and Rescue

Squadron (442 Sqn) from 19 Wing, Comox, showed exceptional dedication to their Search and Rescue (SAR) mandate in support of mass evacuation efforts caused by the unprecedented landslides that occurred near Agassiz, British Columbia (Canada). These unstable landslides trapped hundreds of travellers between the rising river and the cliff face on Highway 7.

A 442 Sqn CH149 Cormorant (AgustaWestland AW101) was initially tasked to insert a Heavy Urban Search and Rescue (HUSAR) team. While they were enroute, the 442 Sqn leadership quickly realized the extent of the danger and that more assets would be needed. On their own volition, within 2h they deployed two more CH149s and a fixed-wing de Havilland Canada CC115 Buffalo.

Utilizing the remaining daylight, 442 Sqn was able to safely complete the evacuation of 311 people, 26 dogs -and a cat – the largest mass evacuation in Cormorant history. During this process, search and rescue technicians confirmed that there was nobody else trapped in the submerged vehicles.

THE SIR BARNES WALLIS MEDAL

SQN LDR CALUM LAW

No. 6 Flying Training School is responsible for the delivery of flying training to some 1,000 University Air Squadron students and Air Experience Flights to 25,000 cadets every year. As one of its Squadron Commanders, Sqn Ldr Calum Law recognised



an opportunity to improve exposure to the aviation environment through low-cost synthetic training.

Law designed, self-funded and built an augmented reality training aid which provides a handset-based knowledge platform, including 3D aircraft models, key documentation and airspace information. This integrated Virtual Reality Tutor aircraft trainer is now fully active and utilised daily within his squadron. These training devices are simple enough to allow students to operate them on their own, yet are sufficiently complex to provide genuine side-by-side, or remote, flying instruction for students who might struggle to assimilate certain skill sets.

With senior level support, Law has now produced an integrated strategy, business case and a financial plan that is expected to deliver this capability to 12 locations within this financial year, at a cost of less than £250,000, some £5million less than external quotes.

THE GRAND MASTER'S MEDAL



ASSOCIATE TRAVIS LUDLOW

Travis became a Guinness World Record Holder by flying solo around the world in a single-engined aircraft at the age of just 18 years

and 150 days and, in doing so, became the then-youngest person to solo circumnavigate the globe, 13 days younger and 31 days faster than the previous record holder.

Travis completed his epic journey in just 44 days and he flew 22,307 nautical miles (40,072km) during his expedition. His record-breaking flight in his 2001 Cessna 172R took him across Europe, through Russia and the Americas (North, Central and South), before returning via Canada, Greenland and Iceland. The planned route took in 53 stops across nine continents and 21 countries.

He started flying at the age of 12, becoming the UK's youngest glider pilot at 14. Travis flew solo the day after his 16th birthday and went on to pass all nine ground school exams with six months to spare, but had to wait until 8am on the morning of his 17th birthday to pick up his PPL licence from the UK CAA, when he became the youngest certified PPL pilot.

At the age of 19 Travis joined Leading Edge Aviation in January 2022 to study for his UK CAA and EASA ATPL theory exams. Once he has completed these he will then undertake the Commercial Pilots Licence and Multi-Engine Instrument rating.

THE BRACKLEY MEMORIAL TROPHY

SQUADRON LEADER RICHARD WALLER



Historically the Royal Air Force's Air Mobility Force relied on paper products to support its fleet. Having returned to the RAF from a civilian flying career, Waller recognised that not only did that approach limit agility, but there was also considerable

financial and environmental cost involved in the continued production of paper products.

Despite the prevalence of tablets in aviation, the regulatory structure of military operations had not adopted Electronic Flight Bags. Challenges included identifying funding opportunities, along with running the competition to select a software provider and sourcing mounting solutions for the cockpits of Lockheed Martin

C130J, Boeing C17 and Airbus C17 Atlas aircraft. Waller also organised and supported all trials work, in addition to developing consequent submissions that resulted in the acceptance of this new and vital capability within the Air Mobility Force, and his expertise has subsequently been recognised by the Lockheed Martin F35B and Eurofighter Typhoon communities.

THE JOHNSTON MEMORIAL TROPHY



RAF E-3D SENTRY FORCE

The Boeing E-3D Sentry entered RAF service in 1991, operated by Nos 8 and 23 Squadrons as front-line units, with No 54 Squadron as the Operational Conversion Unit and No 56 Squadron as the Operational Evaluation Unit. It has been involved in every major NATO operation since 1992 as well as on air policing and counter-narcotics smuggling operations in the Caribbean.

Sentry Squadrons have been awarded battle honours for operations in Kosovo, Afghanistan, Iraq and Libya. The first of these was earned over Kosovo in 1999 during NATO's Operation ALLIED FORCE, during which Sentrys completed 184 operational sorties.

In the immediate aftermath of the 9/11 attacks, Sentry was committed to Operation VERITAS in Afghanistan, co-ordinating the colossal air-to-air refuelling effort. The Sentry was then rapidly redeployed to Operation TELIC in early 2003, maintaining an unbroken 24/7 orbit overhead Western Iraq and amassing over 900h on task before the Iraqi surrender.

During operations in Libya in 2012, the Sentry provided tactical control and early warning for RAF Hercules aircraft evacuating UK nationals. A typical month over Libya included flying over 280h, managing airborne refuelling, control of 95 dynamic target strikes and co-ordination of over 100 humanitarian flights.

In 2014, the Sentry was deployed on coalition operations against Da'esh, and conducting NATO assurance missions on average three times a week from RAF Waddington. Finally, in 2021 No 8 Sqn deployed to RAF Akrotiri to provide airborne early warning cover for the UK carrier strike group as it transited the Eastern Mediterranean en-route to East Asia, to end Sentry service covering over 96,000 flying hours over 30 years.

THE SWORD OF HONOUR



PM ROBERT POOLEY

Robert Pooley has been totally involved with General Aviation for some 60 years. After service in the RAF, he established what is now known as Pooley's Flight Guides, now also available in electronic format. In 1964 he 'invented' the Dawn

to Dusk Challenge competition, which is now in its 59th year. For many years our late Patron, HRH The Prince Philip, Duke of Edinburgh was Chairman of the judging committee.

Robert was a long-term member of the Helicopter Club of Great Britain where, as Chairman, he was involved in setting up the first World Helicopter Championships and ran the second. He was President of the Hemel Hempstead Branch of the Air Training Corps for six years and supplied the ATC with free equipment. Among his other GA involvements have been: Vice Chairman Royal Aero Club; President 1187 Squadron ATC; Chairman of The Balloon Club; Director of the Wallop International Air Show and organiser of 'Music in The Air'; Trustee of the Museum of Army Flying; Vice President, Guild of Aviation Artists; and Vice President of the British Precision Pilots Association.

Following 23 years of service in the then Guild of Air Pilots, during which he fundraised tirelessly, he was made Master in 1987. His contributions to the Guild included starting flying scholarship schemes for young people, which he paid for himself in the first years.

With the acquisition of all the tooling, but not the brand name, of Wilkinson simply because he could not allow such an historic craft to be lost, he formed Pooley Sword. Building this iconic British accoutrement back up to the highest level, his generosity to aviation continued. He donated sufficient RAF ceremonial swords to Cranwell to allow each cadet on parade to carry one.

THE MYLES BICKERTON TROPHY



STEVE JONES

Steve Jones is a retired British Airways Boeing 747 Captain, former Red Bull Air Race pilot and Race Director, warbird display pilot and seed investor and company pilot for

aerospace start-up, Electroflight Ltd. Electroflight Ltd has recently completed the ACCEL (Acceleration of Electric aerospace) for Rolls-Royce, to develop and build the world's most powerful and fastest record breaking electrically powered aircraft.

Steve, with his huge amount of air race and warbird experience, worked alongside Phill O'Dell, RR flight test pilot, to develop the best and safest method of operating and flying the electric NXT aircraft, which had very unusual flying characteristics, operating at the most forward centre of gravity limit and maximum all up weight. Steve also helped develop the best course through the record run track, developing the optimum turns to keep the speed/energy.

The Electric NXT aircraft, 'Spirit of Innovation', flew for a total of 30 flights, with a total flight time of just under seven hours, covering 2200km distance. Steve flew it for a total of eight times and gained four world records: three of them have now been ratified, with three of the records in one flight!

THE HANNA TROPHY

STUART GOLDSPIK

Stuart Goldspink is a third-generation aviator. His grandfather was in the Balloon Regiment that later became the Royal Flying Corps. His Father was a wartime Air Sea Rescue pilot, and also flew Douglas DC3s on the Berlin Air lift,



before becoming a Capt with BEA on the Vickers Viscount.

Stu learned to fly in New Zealand aged just 17½, and on his return to the UK he towed gliders at Dunstable to build the hours needed for his commercial licence. He worked as a crop spraying pilot for eight years flying the Piper Pawnee. It was here that he started building his first aeroplane, a Pitts Special, which he went on to display and compete. The first real warbird that Stu flew was the 1928 Nieuport 2, and he progressed to World War 2 aircraft after being asked to fly for The Fighter Collection at Duxford. Here he discovered his favourite aircraft of all time; the P47 Thunderbolt. He can also be found displaying various aircraft in New Zealand as the UK season winds down.

At Duxford, Stu flies for The Fighter Collection and the Aircraft Restoration Company, flying and performing elegant displays in Spitfires, Mustangs, Hurricanes, P-40s, Bearcats, Corsairs and Curtis Hawks. At Old Warden, he

flies not only World War 2 fighters but also Great War and even Edwardian aircraft. There are very few people who can say they have displayed a monoplane, bi-plane and triplane – or aircraft of three different generations - at one event and on a single day. He has flown 12 of the World's 17 airworthy Hurricanes and Sea Hurricanes.

THE DERRY AND RICHARDS MEMORIAL MEDAL



PHILLIP O'DELL

Phillip O'Dell, known to everyone as "PoD", joined the RAF in 1984. After flying tours on the Buccaneer, Jaguar, and Hawk, he graduated from the French Air Force test pilot school at EPNER in 1998. He then served as Officer Commanding

Research & Development Flight at MoD Boscombe Down, until joining Rolls-Royce in 2001. As Chief Test Pilot and Director of Flight Operations, he was the project pilot for the Hawk Adour engine upgrade and the Trent 900 engine development for the A380. He flew as a project pilot for the Rolls-Royce Boeing 747 Flying Test Bed during Rolls-Royce Trent 1000 development, as well as flying the company Gulfstream G450 and Spitfire PR.XIX. He was also instrumental in the "Vulcan to the Skies" project, eventually flying as one of the display pilots.

PoD was the founder and CEO for the Fly2Help Charity which introduces young children and adults to career possibilities in aviation and provides air-adventures for those in need through its "Air Smiles" days. He has also served as chairman of the ADS Flight Operations Committee.

In 2018, PoD joined a small team within Rolls-Royce that became Project ACCEL (Accelerating the Electrification of Flight), and he acted as Project Test Pilot throughout the programme. The flight test programme fully tested PoD's skills as a test-pilot. The record attempt required him to extract maximum performance from a challenging aircraft in a demanding environment. The aircraft had limited directional stability, high control forces in pitch, poor field-of-view, and limited endurance.

On 16th November 2021, PoD piloted the Accel aircraft to a top speed of 555.9 km/h over 3km, smashing the existing record by over 213 km/h. The aircraft would also break the class records for 15km and fastest time to climb to 3,000m.

THE ERIC 'WINKLE' BROWN MEMORIAL TROPHY

JAMES F KROMBERG

James F "Flipper" Kromberg currently serves as a project test pilot, flight test, and engineering consultant at the 661st Aeronautical Systems Squadron, a combined United States Air Force acquisition, ground, and flight test unit in Englewood, Colorado.



He has over 35 years of experience as a United States Marine Corps, United States Air Force, and contractor instructor test pilot, weapons and operations officer, program manager, and Federal Aviation Administration Designated Engineering Representative. In 2021, he led a \$100million testbed development effort aimed at providing a testing solution for next-generation airborne sensor development and operations. Additionally, in recognition of his test experience and expertise, Kromberg was selected to validate the integration of a new seven-blade propeller on the Pilatus U-28A aircraft; the first-of-its-kind to be installed on a PC-12 derivative.

Kromberg has played a key role in testing and fielding advanced ISR and battle management capabilities, and was instrumental in identifying Dornier C-146A Wolfhound take-off and landing data safety and capability errors in the aircraft's flight manual.

THE SIR JAMES MARTIN AWARD



DAVID HOWSON

Over a 30-year Civil Aviation Authority career, Dave has tirelessly championed and delivered safety improvements into the offshore helicopter sector by driving forwards an extensive research programme which has reduced the likelihood of

accidents and increased their survivability.

He secured funding to create algorithms that provide timelier alerts to helicopter pilots of the potential for obstacle, terrain, or water collision. Dave wrote the resultant Helicopter Terrain Awareness and Warning System (H-TAWS) into an open-source design specification and championed its incorporation as a



manufacturing standard to which all the major rotary manufacturers have now committed.

In addition to his determination to reduce accident likelihood, Dave has also dedicated himself towards increasing the survivability of such events. Research findings after the tragic 2013 Sumburgh helicopter accident indicated that the cold-water gasp reflex might prevent appropriate use of underwater breathing devices that require individuals to initiate airflow by taking a breath inward. In response, Dave campaigned for the introduction of 'Enhanced Emergency Breathing Systems' that actively drive air into the mouth, now standard in the North Sea and being adopted internationally.

Dave has also championed amendments to regulations on the size of exits and the seating distribution of passengers to take account of biometrics and the burden of submersion suits, and research into conditions that reduce egress opportunities, including the chances of safe exit in rough seas, resulting in amendments to regulations relating to the weather parameters for safe flight.

THE CUMBERBATCH TROPHY



DR RATAN KHATWA

Ratan Khatwa is an aerospace engineer who has dedicated over 30 years to improving flight safety in commercial and business aviation. After earning a Doctorate in Aeronautical Engineering (University of Bristol) Ratan joined the Royal Netherlands National

Aerospace Laboratory for

seven years, specialising in flight deck Human Factors (HF) assessments of terrain displays and take-off performance monitoring. He moved to Rockwell Collins in 1997 and subsequently joined Honeywell Aerospace where he became a Senior Fellow and later Chief Engineer - Human Factors. He recently joined Boeing where he serves as the Chief Strategist and Designer for flight deck HF.

He has made significant contributions to the development of advanced flight deck systems and at Honeywell he provided HF oversight and guidance for integrated flight deck systems on new aircraft. He holds 50 patents covering alerting, display, navigation, surveillance, and flight path management functions.

In addition Ratan has authored over 75 technical publications focusing on human-centered design of flight

deck systems and landmark flight safety investigations that transformed global safety standards for addressing Controlled Flight Into Terrain (CFIT) and Approach & Landing Accident Reduction (ALAR). He is a Fellow of the Royal Aeronautical Society and currently Chair of the GAMA Flight Deck Human Factors Design & Certification Working Group, a member of the Flight Safety Foundation's International Advisory Committee, the RTCA CEO HF Steering Committee, and EUROCONTROL's Global Action Team for the Prevention of Runway Excursions, and is past Chair of EASA's Flight Deck Design & Certification Sub-Group.

THE GLOVER TROPHY

ALEXANDER EL KHAWAJA

Alexander obtained a Bachelor's Degree in Hospitality and Tourism Management in 2016 from the Lebanese American University. Following his degree, in 2017 he joined Cranfield University where he studied an

MSc in Air Transport Management, became a member of the RAeS and acted as Student Ambassador.

Alexander joined FTEJerez through Middle East Airlines' extremely competitive cadet programme. In ground school he obtained a 93% average score in all exams and his theoretical instructors praised his contributions to class debates and positive and proactive attitude. During flight training, he obtained first-time passes in all tests, received outstanding reports from his flight instructors and achieved a Grade 1 (outstanding performance) in his multi-crew training (APS MCC)

Alexander managed to do this during the pandemic, when he was President of the Student Committee. While most students returned home during lockdown, some international students could not do so due to travel restrictions and had to stay at the FTE campus. Alexander decided to voluntarily stay on campus too, and make sure that his colleagues were supported in any way necessary, that health & safety regulations were followed, and to liaise with FTE's management.

Consequently, Alexander was also recently awarded the Mike Bannister Trophy which is awarded only on very exceptional and rare occasions to students demonstrating an outstanding performance in all aspects of their student life at FTEJerez.



THE CENTRAL FLYING SCHOOL TROPHY



MASTER AIRCREW STEPHEN DUNCAN

Master Aircrew Duncan leads the Instructor Development Flight on Number XXIV Squadron RAF, the Air Mobility Force (AMF) Operational Conversion Unit (OCU). Having founded

this Flight from an unfunded standing start in 2017, his work over a five-year period has placed the Squadron at the leading edge of frontline instructor training.

The Instructor Development Flight, comprising Duncan and only two other subordinate Air Loadmaster Qualified Mission Aircrew Instructors (QMAs), is central to Number XXIV squadron's role and output as a Central Flying School (CFS) Approved Training Organisation. This enables the AMF to generate its own Qualified Flying Instructors (QFIs) and QMAs. Step one of both courses is completion of his franchised Defence Train the Trainer Air (DTTT) courses, but Duncan also fulfils a key interface role with No 22 Group in guiding the frontline operational squadrons in the CFS selection process for new instructor candidates.

His introduction of a formal pathway to an above-average CFS A2 qualification promotes ambition and ensures that a sustainable system for succession planning is in place. Three new A2 qualifications were awarded to Number XXIV Squadron Instructors by CFS in 2021, providing inspiration for the six new B2s.

In parallel, the Level 5 Coaching and Mentoring course supports not only experienced instructors but has included wider Defence participation. His close relationship with the Smith Barry Academy has recently yielded a franchised Flying Training Manager's course that is tailored to Air Mobility Force output, saving significant resource.

THE PIKE TROPHY



UPPER FREEMAN ANTHONY MOLLISON

Anthony Mollison started his career working for several well-known companies in marketing, having graduated from the University of Durham with a BSc and then gained a MBA from Cranfield School of Management.

He acquired a recreational PPL in his early 30s and, after

being made redundant in 1987, he decided to pursue training for a commercial licence.

He worked as a flight instructor for several years and then took over Greenclose Aviation, a small commercial training school at Bournemouth in 1993. He renamed the company Professional Air Training (PAT) and over the following 24 years, he built up an enviable reputation for high quality instruction with excellent first-time pass results. He had become an FE(PPL) in 1995, then an IRR Examiner with PT Ops privileges the following year.

Mollison was appointed as an IRE in 2006 and following the CAA's internal restructuring of examiner training, Mollison set up a specialised flight training organisation, Flight Examiner Training (FET), for the training of GA professional flight examiners.

FET also provides Examiner Refresher Courses, both at Bournemouth and at Andrewsfield in conjunction with Carol Cooper. Despite closing down PAT after selling the aircraft, Mollison continues to be deeply involved in training, especially of GA examiners and provides a unique and valuable service to the industry.

THE JOHN LANDYMORE TROPHY



WILLIAM COOPER

Will Cooper won the Lane-Burslem (BALPA BF) PPL Scholarship and completed his training with Alex Air in Aberdeenshire.

From the initial impression that he made upon the

scholarship selection committee to the approach he adopted during his flying training, Will was exemplary. His ground school results were top class and his whole approach to the learning process and personal application required to be a proficient and able pilot were present from the outset. Will's enthusiasm and determination to achieve his goal were evident to his ground and flying instructors. His attitude was always positive and his instructors say he was a pleasure to teach.

THE SIR ALAN COBHAM MEMORIAL AWARD

PM CAPT PETER L BUGGÉ

Peter Buggé was appointed as the Company's Honorary Archivist in 2013, eight years after



serving as the then-Guild of Air Pilots Master.

During his tenure as Honorary Archivist, Peter spent many weeks and months toiling quietly in Cobham House improving the recording of all the archive documents which the Company had in its possession at the time. Over the years, he produced a digital record of the catalogue of papers and other records within the archive, enabling for the first time a readily-accessible search document. He also photographed many of the items of significance, which were able to be shown on the website. When the Company moved from its former location to Air Pilots House (APH), Peter was responsible for the safe and orderly packing – and unpacking two years later – of all the archive material. He then set about designing the layout for storage and display of all archive material at APH. Another ‘first’ for the Company was his enthusiasm to give presentations to members on the material at APH, which is a ‘treasure trove’ of historic importance unknown to the vast majority of members.

Such is the scale of the task of managing the Company's archives is that the work started by Peter in 2013 – and the hundreds of man-hours involved during his tenure - is still a work in progress for the current Honorary Archivist.

REGIONAL AWARDS

THE AUSTRALIAN BI-CENTENNIAL AWARD



STEVE PADGETT OAM

Steve Padgett has been in aviation since 1964. He learned to fly at age 16, winning a Royal Australian Airforce (RAAF) Flying Scholarship through the Air Training Corps (ATC), earning commissioned rank, Commercial Pilot's Licence and Instructor Rating aged just 19. He has over 3,000h

flying experience and has flown numerous types of aircraft from gyroplanes to business jets.

Whilst remaining in the RAAF Reserve Forces as an Instructor to the ATC, he joined Hawker de Havilland and launched his own business in 1978, going on to form Aeromil Australia (later Aeromil Pacific) in 1980.

During the 1990s, he and partners acquired Austin Aero, in Austin Texas. In 1995, he moved his aviation interests in Australia to a greenfield site on Queensland's Sunshine Coast Airport in order to develop Aeromil and other opportunities, which included the formation of Sunshine Express Airlines in 1998 and, in 2002, the establishment of

the Singapore Flying College Advanced Jet Training facility - now Universal Training Systems (UTS) - on behalf of Singapore Airlines.

Also, at the airport, his personal business interests include Flight Options Pilot Academy, Flight Options Charter and Aircraft Management and SJP Aviation aircraft sales and specialist consulting services. In 2002, Padgett co-founded Alliance Airlines, acquiring the assets of Flight West Airlines: Alliance now has over 40 Fokker aircraft in service, with over 600 employees and bases all over the country.

In 2005, Padgett's company Aeromil Pacific secured the representation rights for Cessna and it became one of Australia's largest and most successful privately owned and operated aviation companies, acquired by Hawker Pacific in 2015, with Steve appointed Deputy Chairman of Hawker Pacific (Australia).

Padgett is Chairman of the Australian Aviation Hall of Fame, a member of the Australian Air Force Cadets Foundation and life member of the Regional Aviation Association of Australia. In June 2019, he was awarded the Medal of the Order of Australia (OAM) for outstanding achievement and service.

THE GRAND MASTER'S AUSTRALIAN MEDAL



ROYAL AUSTRALIAN AIR FORCE CENTENARY FLYPAST TEAM

On 31 March 2021, the Royal Australian Air Force celebrated 100 years of service since becoming an independent Air Force. In that time, the Royal Australian Air Force has grown from operating wood and canvas aircraft, to become one of the most integrated and capable fifth generation Air Forces in the world today.

A significant element of the centenary celebrations was a flypast over Canberra, including participation in the parade in which the Royal Australian Air Force was presented with a new Queen's Colour. The flypast culminated in a display over Lake Burley Griffin in Canberra by the Royal

Australian Air Force aerobatic display team, the Roulettes. Planning for the event required significant and complex effort over a period of nine months, and culminated in the majority of the current Royal Australian Air Force inventory and over a dozen historic aircraft being represented in the flypast. In all, 57 aircraft with varying performance characteristics participated, many making multiple appearances over a period of 90 minutes. The display aircraft were supported by air-to-air refuelling assets and a co-ordinating Airborne Early Warning and

Control aircraft. Participation was also coordinated with Australian Army helicopters and a Royal Australian Navy Seahawk helicopter that 'paraded' the underslung Royal Australian Air Force Ensign to the significant crowd.

Grp Capt Tim Sloane and his team of four (Sqn Ldrs James Denton, Jason Gamlin, Christopher Rogers and Flt Sgt Tim Muehlberg) undertook all of the planning and liaison for the event. Organisation and execution of the event was not without challenges, including Covid-19 and floods affecting team members and potential participants. □

THE FOLLOWING REGIONAL AWARDS HAVE ALSO BEEN ANNOUNCED, BUT WERE NOT AMONGST THOSE PRESENTED AT THE T&A BANQUET.

MASTER'S TROPHY FOR THE AUSTRALIAN REGION



LIVERYMAN CAPT ROBERT G DICKER

After a distinguished 30-year career as an airline pilot, including 20 years with Cathay Pacific (Captain on Airbus A330 & A340) Rob Dicker re-settled in Australia. With a passion for flying training and youth development,

Rob was soon head of the Australian Region Aviation Careers and Education Committee (ACEC). In that role, Rob enhanced the visibility of the Australian Region's aviation scholarship program, seeking out value-adding aviation company support, adding several scholarships to the ACEC program, and setting a new bar for selection to scholarship courses, including CPL and ATPL exams, instrument rating and multi-crew courses.

Rob was elected Chairman of HCAP Australian Region at the Annual General Meeting in 2019. He covered numerous issues, adding to the engagement of HCAPA with the regulator, Airservices, and numerous other agencies. Rob's tour of duty coincided with Covid-19. Throughout the pandemic, Rob maintained an outstanding level of contact with the Executive Council, using Zoom meetings to best effect; he looked after the welfare of all HCAP/HCAPA members, from those directly impacted by the standdowns and lay-offs, through to senior members who were 'locked down' and restricted with limited family support and/or social contacts.

In his spare time post-Cathay, Rob has completed a degree in Geospatial Engineering (with 1st Class Honours) and is an active flying instructor at the Royal Australian Navy base/HMAS Albatross flying club at Nowra.

MASTER'S TROPHY FOR THE NORTH AMERICAN REGION

ICARUS DEVICES

Inadvertent Instrument Meteorological Conditions (IIMC) and marginal weather conditions have claimed scores of lives due to the startle effect. The Instrument Conditions Awareness Recognition and Understanding System, or ICARUS, is a smart

view-limiting device that is combatting these accidents with more realistic training. It provides superior scenario-based training with a lightweight visibility-changing visor and an easy-to-use app. ICARUS combines the control of a simulator with the inner-ear sensations and "seat-of-the-pants" pressure that cannot be replicated on the ground. The instructor or safety pilot can adjust the actual level of visibility (2 miles, 1 mile, ½ mile, etc.) and speed at which the device's PDLC visor becomes "cloudy". ICARUS is extremely affordable and adaptable for use in any aircraft. It also trains pilots for dealing with smoke, dust, snow, and other obscurations.

The ICARUS Device went into production in 2022, has just been approved for use by the US Army in Black Hawk helicopters and is in service with flight schools, colleges, private aviation operators, EMS, law enforcement, government agencies and more.

Inventor Nick Sinopoli designed the ICARUS Device after a close friend perished in a spatial disorientation accident. He sold his car to fund his patent which was granted in 2016. He holds an Aeronautical and Astronautical Engineering degree from Purdue University and serves as a US Army National Guard Captain. He is a dual rated pilot with time in numerous aircraft and helicopters. □





Waterbird brings flying back to Windermere (Mark Wright)



WATERBIRD: THE FIRST STEP

By Freeman Anne Hughes

The drive along the west shore of Windermere in search of a road leading to the shoreline is challenging enough, but the steep, bumpy, winding track through the woods along which *Waterbird* was transported for her first public flight is best left to the imagination. Arriving at a large temporary hangar on the shore you are immediately taken back over 100 years as the 35ft-long replica seaplane sits on the trailer awaiting her debut. The dedicated team quietly make their final adjustments and checks and the only sound of the gentle lapping of the waves in the sheltered bay belies the excitement as film crews and photographers prepare their copy.

On Lake Windermere on 25th November 1911 *Waterbird*, constructed of wood, wire and bamboo, hit the headlines when, piloted by Herbert Stanley Adams, whom project sponsor Capt Edward Wakefield had met at Brooklands, made the first successful flight of a seaplane in the UK. For the Lakes Flying Company Ltd, a registered charity, the project to build a replica of *Waterbird* had begun 14 years ago with the discovery of archive material and the original drawings. The original aircraft was commissioned by Edward Wakefield from AV Roe & Co as a landplane and converted to a seaplane at Windermere. Capt Wakefield

had also designed the floats (the first in the world to feature the now-universal drag-reducing step), and the archive belongs to the Wakefield family. Wakefield's great, great nephew, Richard Raynsford suggested that a full-size airworthy replica could be built.

The project was taken on by Gerry Cooper who built a landplane replica at Wickenby Airfield, with the support of the Light Aircraft Association and, following a successful flight from the airfield, the next step was to enable the aircraft to fly from water. Ian Gee, director of the Lakes Flying Company, took over the project and with a dedicated team of engineers and enthusiasts set about the design of a stepped float so that the original flight on Windermere could be recreated. With a wingspan of 40ft and weighing 1000lb (454kg) the replica recreates the detail of the 1911 seaplane, using many of the original materials, including bamboo. However, a Rotec 2800 seven-cylinder radial engine of 110hp (82kW) substitutes for the 50hp Gnome engine used in 1911.

TESTING THE LIMIT

Until the replica *Waterbird's* first test flight, no seaplane had flown from Windermere for nearly 30 years. The lake had resounded to the sound of the Short Sunderland Flying Boats which were built at White Cross Bay during the World War II but, without special dispensation from the National Park Authority, seaplanes have not been permitted to fly from, or land on, Windermere since 2005.

Turning the clock back to 1911, newspapers across the country reported on the noise and inconvenience that would be caused by such aircraft and a local campaign, led by Canon Rawnsley and supported by Beatrix Potter, endeavoured to ban them altogether. In January 1912 Wakefield sent a letter to the Royal Aero Club asking the



The original Waterbird of 1911 (Lakes Flying Co)



Waterbird of 2022 is a faithful replica (Mark Wright)

RAeC to use its influence to prevent any order prohibiting flights over Windermere. The debate eventually came to the attention of the First Lord of the Admiralty, Winston Churchill, who could see that seaplanes could be used by the Royal Navy in the future. On 20th January 1912 *Waterbird* was test flown by Lt Arthur Longmore for the Royal Navy. In April 1912 Churchill, stated in Parliament that flights on Windermere were to be permitted. Despite local debate continuing, flights were enabled to continue and a flying school set up.

There has been a speed limit (currently of 10kt) for powered craft on Windermere since 2005. The Lake District National Park has the power to grant permission to exceed this limit by way of an exemption application process. The take-off speed of the *Waterbird* replica is 30kt, so for any flight the application must be approved. Other boxes had to be ticked, as for a public flight the CAA also appoints a Flight Display Director (in this case Charles Sunter) to oversee all the safety issues around the flight. A rescue boat with diver, and boats for Lake Rangers and Lake Wardens were in place on the day, following notification to lake users that the flights would be made on the lake at a specific time. Fortunately, this being England, and in an area notorious for rain showers, a fall-back date was also arranged.

FIRST FLIGHT

Pete Kynsey, well known at Duxford for his display flights during air shows, operates an Aviat Husky on floats from the South of England and also provides float-plane training. Pete was the obvious choice for the test flying of *Waterbird* on Windermere but did admit to some trepidation before the first test flight. However, on the appointed day for the first public flight, 22nd September 2022, he climbed



Pilot Pete Kynsey

up to the open wooden seat and prepared for a flight that would be watched by hundreds of enthusiasts on the banks and by many film crews ready to air the story on the news channels.

The team was well rehearsed for the launch, having dressed in waders and wet suits, and we watched as *Waterbird* G-WBRD was slowly manoeuvred out of the hangar and hitched up to the tow car for the careful transfer into the water. The seaplane was released from the trailer and turned round ready for Pete to start up the engine. Looking a little vulnerable in this new environment *Waterbird* suddenly came to life, accompanied by cheers from the bankside from all who had committed to the project over the years, and members of the families whose relations had built and flown the 1911 *Waterbird*. She taxied out into the water and along the lake, accompanied by the support RIB boat.

She took to the air as more cheers could be heard around the lake while a moment of history was re-created. After four 'hops' she taxied back and Pete's smile was apparent as he turned into the bay and the team waded out to bring her in and re-install her in the hangar.

A few days later, *Waterbird* was again dismantled ready for another nail-biting journey up the track and back to her temporary home at Liverpool Airport. Two dreams have been fulfilled. Firstly in 1911 when the first seaplane was successfully flown in Britain and prepared the way for new generations of floatplanes; and secondly the dream of the dedicated Lakes Flying Company team which recreated the replica of that delicate aircraft from fabric, wood, wire and bamboo and saw her fly in 2022 was also fulfilled. However, the story is far from the end as the intention is to find a permanent home for *Waterbird* on Windermere where she can be seen by enthusiasts and visitors and make occasional flights on the lake for all to enjoy. For this last part of the project to be completed the team is looking for ideas and support so that future generations can understand the full story of wings over Windermere. □

THE TYMMS LECTURE: LONDON'S AIR AMBULANCE

By The Editor



The 2022 Sir Frederick Tymms Memorial Lecture was delivered at the RAF Club on 21st September by Upper Freeman Neil Jeffers, Chief Pilot of London's Air Ambulance. He started the lecture with some history, going back to the UK's very first medical

helicopter service in Cornwall and coming up to the present day with 40 medical helicopters supported by 21 different charities across the country. The London operation had had its roots in discussions at the Royal London Hospital in 1988, with concerns raised over the fact that, with over 300 hospitals and clinics in London, some patients were not getting to the right hospitals and – as a retrospective study was to establish – around 1,000 patients had been lost as a result.

In 1989 Express Newspapers under Lord Stevens had funded the first London medical helicopter – a £4million Aerospatiale Dauphin. Despite some hostility from the



A huge team is needed to keep two helicopters in the air

public to the noise and disruption of helicopters, and some scepticism from the CAA, the service had proved its worth. In 1994 sponsorship had been taken on by Sir Richard Branson, who had himself been rescued five times already by helicopters around the world. Today the charity employed 54 charity staff, 11 consultants, 10 registrar doctors and five pilots, with an annual running cost of £8.8million.

CALL BREAKDOWN

London's near-nine-million residents, living in an area roughly 18 X 30 miles (29 X 48km) made some 6,500 emergency 999 calls every 24h, with the Air Ambulance being tasked to respond to the most appropriate ones as determined by the 999 call-handlers. The breakdown of the types of calls responded to was roughly 22% for falls, 35% for penetrations, 23% for traffic accidents, 6% for medical emergencies and 14% for other types.

Although the 999 service was receiving around 30 calls a day for stabbings, the helicopters were only sent to those involving chest or groin injuries.

Because of the demanding duty cycle, a medical helicopter needed more than the normal manufacturer's recommended servicing – in London's case some 54 days off-line on servicing – so a second helicopter had been bought, meaning that there was always one ready to fly and one spare, giving a 99% availability when flying conditions were suitable. In 2021, those two helicopters had handled 1,713 patients, and in the last 10 years the number of calls for them had stayed constant at around six per day.

The Air Ambulance's helipad at the Royal London, at 320ft above ground level, was the highest in Europe, and with a helicopter holding 534l of fuel, fire crew were stationed there at all times during operations. With longer operating hours in summer the five permanent captains were supplemented by four co-pilots: pilots were expected to have over 3,000h experience, with some sort of relevant background, and specialist training for the role took six months.

MULTI-PILOT OPERATION

London's Air Ambulance had been from the beginning, at the CAA's insistence, a multi-pilot operator, and other heli-med services were now going down the same route. Everybody on board the helicopter was responsible for safety, and any of the five people on board could order a go-around.

Although the helicopters could nominally land anywhere, the minimum requirement was for a 24 x 24m space with no wires. Foreign Object Damage was a concern – on one occasion a garage forecourt sign which had been affixed using only Blu Tack had blown off into the blades of the helicopter, but there had been only two such incidents in 34 years. Cranes were another worry: whereas in



Landing spaces are often tight

France all construction cranes had to be painted yellow or orange, in the UK the colour was the operator's choice, which made some hard to see. Drones were also a concern, as they were becoming more common, and even some hospitals were starting to use them.

MOST CALLS BY CAR

Although it was an Air Ambulance service, in fact 61% of the calls were handled by car – which was the only option at night or in bad weather – and the service now had six fast-response cars.

Emphasising that the London Air Ambulance was more about delivering a medic to the patient rather than delivering the patient to a hospital, Neil discussed some of the medical procedures for which the service had become famous. Only on 8% of calls was the patient transferred to hospital by the helicopter – more usually it was carried out by road ambulance.

London's Air Ambulance's future held significant challenges:

the existing MD Helicopters MD902 aircraft were ageing and not well-supported, and replacements were needed. None of the country's air ambulance services



A year's worth of sorties in London was Government-funded and, he said, approaching the NHS for millions of pounds for a new helicopter would be treated as being crazy... While there had been some money from the LIBOR fines fund, the service was primarily dependent on charity funding. The service was now running an "Up Against Time" appeal to raise some £15million to acquire new helicopters and train their crews by 2024 – on top of the annual £10million running costs. (See www.londonsairambulance.org.uk/up-against-time for details.) □

LADIES' VISIT TO THE LONDON AIR AMBULANCE

By Eileen Keegan, The Master's Consort

Having been postponed from 5th October because of a rail strike, a group visited the Air Ambulance base at the Royal London Hospital, Whitechapel.



The Company's ladies visit the service

Some of us met first at the nearby Good Samaritan pub, for coffee and a light lunch, before we all convened in the hospital Lobby, to be met by Tanya Moss and Phoebe Nicholson, the Philanthropy team. As the helicopter was not flying, we were taken up by lift to the helipad. It took a little while to get there as priority is given to patients being taken from one floor to the other - we had to vacate the lift just once for this purpose.

A group photo was taken just before we went out to the aircraft where we must have spent at least half an hour up close to the helicopter and talking with

crew members, Captain Andy Thompson, Captain Dave Rolfe and John Power, a member of the fire crew. The aircraft was fully ready for action, but we were able to take photographs and even 'sit in' the fuselage of the aircraft. The weather was dry and sunny but very windy - but that didn't detract from enjoying the whole experience and the 360° stunning views of London. We then descended via a fairly steep flight of steps to the relatively new crew room nearby. More talking with the crew, who continued answering our questions and explaining the complexities of running a 24-hour service. And a mug of tea each at this point was most welcome!

Speed of response is clearly of the essence and once a call comes in, the rapid response results in a take-off within four minutes. This we were able to witness ourselves as the crew responded to a call and lifted off within that time.

The newly launched 'Up Against Time' appeal to replace the current aircraft fleet was at the forefront of our minds and as a group donation, a cheque for £335 was presented before we left. I must mention that the cheque included some kind donations which had been sent to me by others who were not on our tour and a further donation was sent direct to LAA by one of our group, and which was matched by their employer. □

ACADEMIC BURSARY AWARDS 2022

By Liveryman Clive Rose, Chairman, Bursary Selection Panel



For a number of years, the Company has offered three bursaries annually, to applicants studying at City University for MScs in Air Transport Management, Air Safety Management, Aircraft Maintenance Management and Airport Management.

For 2022, applications were invited in February,

with entries to be submitted towards the end of May. Candidates had to provide two essays of 500 words each on the following subjects:-

(a) Explain what position you seek to attain in aviation, the knowledge and skills it would require and how you see the MSc course is helping you to develop that knowledge and skill to achieve your goal. Be specific in relation to the course you are on and the benefit to you.

(b) In the modern air transport business control of costs is essential yet safety is paramount. How can we manage our people and organisations so that these two seemingly conflicting goals of cost control and effective safety management can be reconciled?

Each candidate also had to provide a CV.

The selection panel consisted of Master Robin Keegan, Warden Elizabeth Walkinshaw, Assistant Samantha Waller, Captain Rick Thomas and Clive Rose, Chairman.

Six valid applications were received and the authors of

five were invited for interview via Zoom, with awards being made to Lukas Rewers-Kusiak and Josef Khan.

Lukas Rewers-Kusiak has an Airline Transport Pilot Licence and is

currently working as a First Officer for Flair Airlines, an Ultra Low-Cost Carrier operating in Canada, the United States and Mexico. He is studying for an MSc in Air Transport Management. Interestingly he was referred for his current position by a colleague on the MSc course. He believes that training is the key to successful airline operations. Whilst safety is paramount, top class training can lead to more economical route planning, better management of weather events and the minimisation of diversions or go-arounds which not only cost money but cause delays and upset schedules.

Josef Khan

is studying for an MSc in Air Transport Management and flies as Captain with Ryanair flying the Boeing 737-800. Unusually he is also the CEO and Accountable Manager of Lycksele Airport, a small regional airport in



northern Sweden. He is of the opinion that studying for his MSc was a contributing factor in gaining his current position as the youngest Airport Manager in Sweden. He believes that to run a successful operation it is necessary not only to comply with the regulations but to go above and beyond, to think how safety and efficiency can be further improved by having a positive and open minded attitude. Josef's long-term aim is to start his own airline and we wish him every success in that endeavour.

BURSARIES DISCONTINUED

Only six applications were received this year, compared with 20 or more in previous years, and as a result only two awards were made out of a possible three. Moreover it has been decided to discontinue this programme. It is felt that the money would be better spent on more PPL, instructor and gliding scholarships. It is considered that this will attract more young people into careers in aviation whereas the candidates for the Bursaries have already committed to the industry and in most cases are already earning. □





STILL INNOVATING AT 110

By Wg Cdr James Boning

No IV (Army Co-operation) Sqn, one of the Company's affiliated units, celebrates its 110th anniversary this year: the Squadron's OC looks briefly into its past and reflects on its current task.

Our Army and Navy colleagues would undoubtedly suggest that IV(AC) Sqn, as part of the 'Junior Service', cannot have accrued much history over such a short period of time, but our formation at Farnborough on 16th September 1912 pre-dates that of the Royal Air Force, and as such the Squadron has an impressive tally of Battle Honours. Formed from B Flight of II Sqn, IV(AC) Sqn came into being with the creation of the Royal Flying Corps, serving with distinction over the battlefields of World War I, including conducting low level sorties tracking enemy positions during the Battle of the Somme. World War II saw IV(AC) Sqn deployed to France with Westland Lysander aircraft as part of the ill-fated British Expeditionary Force. Whilst it was an excellent aircraft for reconnaissance and short field landings, the Lysander stood no chance against modern German aircraft such as the Messerschmitt BF109, with IV(AC) Sqn eventually being all-but wiped out by the advancing Germany Army, including the loss of 18 aircrew and 60% of the groundcrew. A significant period of regrouping occurred,



IV Sqn flies the BAE Systems Hawk T2 (Pictures: MoD)

culminating in IV(AC) Sqn re-equipping with reconnaissance variants of the de Havilland Mosquito and Supermarine Spitfire, conducting valuable reconnaissance prior to the D-Day landings.

The 1970s saw IV(AC) Sqn re-equip with the BAe Harrier, a type it was to fly through various marks until 2011, participating in operations over Bosnia, Iraq and Afghanistan. Now equipped with the BAE Systems Hawk T2 training aircraft, our current mission is to train RAF and Navy fast jet pilots in tactics and weapons disciplines, preparing them for conversion onto their front-line operating type of either Eurofighter Typhoon or Lockheed Martin Lightning.

TECHNOLOGICAL INNOVATION

From the early days flying rudimentary Royal Aircraft Factory B.E.2 aircraft over the Western Front in World War I, through to operating then-state-of-the-art Harrier GR9s over Afghanistan, IV(AC) Sqn has always been at the vanguard of technological innovation. Even prior to

WWI, IV(AC) Sqn pioneered night landing techniques and use of airborne radios to co-ordinate reconnaissance and artillery strikes: both of these tools were to become essential features of modern aviation. To this day the segmented sun on the Squadron crest signifies this history of 'round the clock' operations, whilst the lightning bolt points to our air-to-ground radio achievements.

These innovations continue today, with trials ongoing here at RAF Valley to integrate mixed-reality ground-based training, which uses an advanced virtual-reality headset to blend 360° simulator visuals with a real cockpit. This will enable better preparation of complex profiles for trainees, prior to live flying in the Hawk. Whilst these innovations in simulation will form an important aspect of future training, we are some way off an accurate representation of the real-world friction and unpredictability associated with live flying. Use of artificial intelligence (AI) and expanded 'white force' simulator support teams could increase the realism of synthetic delivery, but actually flying the aircraft still has a quality that cannot easily be synthetically manufactured in a simulator.

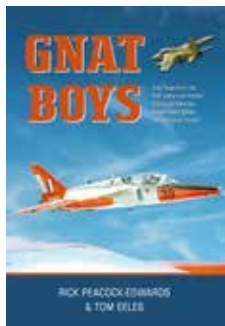
ENGINE TROUBLES

Whilst an issue with the LP stage one compressor of our Rolls-Royce Adour 951 engine has limited flying hours in recent months, the Squadron continues to successfully deliver trainee pilots to both the Typhoon and Lightning forces on the front line – a line that, following events in Eastern Europe, has moved ever closer. As UK defence pivots to address this increased threat to the eastern flanks of the NATO alliance, members of the Squadron have been temporarily assigned to duties in other Headquarters in support of these operations. Whilst this period of uncertainty leaves many questions as to the future, the one certainty is that IV(AC) Sqn's role in training fighter pilots to equip the front line is as vital now as ever. These are the pilots who, in a few short months, will be crewing the Quick Reaction Alert (QRA) aircraft that protect the skies over 'hearth and home' here in the UK, and are also now being sent forward to the new front line, deterring further aggression against NATO partners in eastern Europe by bolstering our presence in the region.

I look forward to maintaining and furthering IV(AC) Sqn's close association with the Honourable Company of Air Pilots and hope to be able to host you here at RAF Valley in the near future. □



LETTERS TO THE EDITOR



IN THE GNAT'S DEFENCE

Dear Editor,

We would like, as co-authors of *Gnat Boys*, to correct some of the statements in the review of the book in the last issue of *Air Pilot*. We will ignore the typos that appear in the review, perhaps to keep the reader alert, probably

missed by the proofreaders!

The statement in the fourth paragraph that: "Fore-and-aft control was by the standby trim tabs" is wrong. The standby trim moved the whole tailplane electrically on selection by the pilot. Fore-and-aft control was achieved manually using elevators, unlocked from the tailplane by the pilot.

The statement that the Gnat: "...was unsurprisingly not a great platform for instrument flying" is not supported by experience. Not only was the Integrated Flight Instrument System a huge advance on contemporary 'black hole' cockpit displays, it was also almost impossible to topple. It made complex instrument flying procedures, such as recovery from unusual attitudes and self-feed to ILS approaches, very much easier. The Gnat was excellent to fly on instruments and an ideal lead-in to flying aircraft such as the Lightning. We simply cannot understand from where the reviewer found his evidence because his comments are just not true.

Neither of us can find in our book any story about a pilotless Gnat making a perfect forced landing at Llanbedr. There is, however, a story by Roy Gamblin describing a forced landing that he and his fellow pilot carried out at Llanbedr after an engine failure. Both he and his colleague walked away from their Gnat once it had stopped just off the runway, to be picked up by the SAR Wessex and taken back to the Officers' Mess bar at Valley. Certainly, this was not a pilotless event.

As for repetition, you must remember that STUPRECC ruled our lives as Gnat pilots and we make no apologies for repeating it many times; it was entirely intentional, as our publisher will confirm. He raised the same observation with us and understood completely our explanation of intent. Even ACM Sir Richard Johns, after a long and distinguished career following his time on the Gnat, can still remember it word perfect.

In conclusion, we feel we have been rather damned by faint praise in the words: "...a volume which does some

justice to the Gnat's place in aviation history". Judging by the comments we have received from many other sources, not just old Gnat pilots, we think we have done more than 'some' justice.

PM Rick Peacock-Edwards

Liveryman Tom Eeles

[The review of Gnat Boys was wrongly attributed in the October issue to PM Peter Benn: it was in fact written by Liveryman Paul Smiddy: the Editor apologises to both for this error]

FASCINATING JOURNEY

Dear Editor,

Freeman Dom Registe reported well on our young pilots, but one sentence gave me pause for thought. I quote: "I think it's safe to say we all still remember standing at an airfield after our first flight knowing we've just accomplished something extraordinary but, more importantly, knowing we have to do it again".

What I remember today from all those many years ago was flying in a Piper PA38 Tomahawk downwind and looking across and down at the parallel runway and realising, in that calm and novel freedom, there was no corpulent instructor by my side!

After I'd taxied back to the neat line of yellow and white liveried Pipers I had no feeling of elation, nor of accomplishment, for this was a mere blip in the continuum of my training, of my life. Perhaps this was because learning to fly at Oxford was my choice, and I paid for every penny of it, loved the technology of it, enjoyed the mathematics of it, thrilled to the prospects of the skies and the independence of it. But also because this was never to be a profession for me; I was too involved in my own architectural practice.

Nowadays we seem to be far too interested in the destination rather than the journey, the prize more than the practice, the glossy image that hides the satisfaction of the work. It is usually wrong to applaud too soon, not to say counter-productive and potentially deceptive. Don't just stand there; nothing is finished yet...

At the end of this mortal coil there is no prize – the journey is the fascination. Afterwards it is clearly too late for self-congratulation!

Freeman Christopher Watts

Les Mosses, Switzerland





FLYING THE 'MISSING LADY'

By Freeman Wg Cdr Chris Fopp

Barely three weeks had passed since we had flown a 17-ship balbo of Scottish Aviation Bulldogs and de Havilland Chipmunks out of Goodwood over the famous south coast

airfields for our annual tribute Battle Formation when the world reeled from the news that Her Majesty The Queen had passed away. Company Freeman Robert Miller and Roger Hayes along with Rob Brown (Mr Chipmunk) are the usual organisers of our formation training and exercises with Robert being an ex-RAF QFI and Roger a multiple air race winner in Bulldogs and Pups. So, on Saturday 17th September 2022, just two days prior to the State Funeral, six Bulldogs and three Chipmunks formed up at Wolverhampton Halfpenny Green airport to pay their respects to one who for most of the pilots and observers had been their Commander-in-Chief.

After a thorough briefing, we walked through positions and changes on the ground then undertook numerous check-ins to confirm we knew who we were - that takes longer than you might think! We cross-checked emergency actions, lights off except for one aircraft as well as transponder on for just another as formations operate as a single entity once airborne. The route briefed including the IP-Tgt run with timings for the red Royal Chipmunk to pull up out as the missing aircraft and we walked to our aircraft accompanied by the ever-professional aviation photographer Keith Wilson in a Van's RV7 photo and whip-aircraft.

STREAMED TAKE-OFF

Split into three sections of three aircraft with streamed take-offs as pairs or threes. The front three Chipmunks as Red Section took off first as a pair of red-and-white RAF Chipmunks (WD359 and WP928) and the all-red Chipmunk WP903 in which the young Prince Charles learnt to fly and went solo with the Queen's Flight in 1969. They were followed by Blue Section of three Bulldogs, the first ex-Hong Kong Auxiliary Air Force HKG-5 with two ex-RAF Bulldogs, XX621 and me flying my trusty stead XX629 in no 3. Closely behind was Green Section with ex-Ghana Bulldog 109 (the only civilian marked of the nine, G-BCUS of Air Race fame) followed by XX546 and XX667. Forming up as three sections in trail, the lead aircraft of each section closed up to the no 4 position of the three in front of him providing us with an extended box two aircraft wide for transit.

Positioning for a straight run to the National Memorial Arboretum, Green 2 and 3 moved forward from the rear of the formation to take up the outer two points of the diamond nine in positions 8 and 9. Now with aircraft finessing their positions, I was now flying in diamond 7 taking my diagonal position references off 4 (Blue 1) in the middle, finessing through to 2 with 3 (the Royal Chipmunk) immediately ahead for my lateral position and across to 6 (Blue 2) for forward and back.



The Royal Chipmunk becomes the 'Missing Lady' (Keith Wilson/SFB Photographic)

A PERFECT PULL-UP

The Royal Chipmunk pulled up and out perfectly on the approach to and we over flew the National Arboretum in 'Missing Lady' finessing as gently as possible, keeping that diamond as tidy as we all hoped – evidence from photos after landing showed we did although I'm sure individual pilots were self-debriefing otherwise until they saw the photos! Even though the formation was entirely for our own benefit and no-one on the ground was aware of our activity it should have been unsurprising that a number of people at the Arboretum caught us on their camera phones and, despite our height, today's technology recorded us sufficiently well not just to show us how tidy we'd hoped we be, but was even picked up by ITV News, BFBS and a number of other media outlets.

This was easily the most pleasurable, stressful and rewarding flight I've ever done. It was a fitting tribute to Her Majesty that our collection of pilots chose to undertake such a flight, testing the skills that, across the team, have been taught and developed over many decades of experience. For an onboard 360° view from my wingtip just search 'National Arboretum Formation' in YouTube, which will also give you a video from the ground. □



INTO THE OVERSHOOT

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

THE SUPERSONIC BIZ-JET IS HERE...

As new supersonic projects encounter delays or are cancelled, news emerges that there is already a supersonic business jet. For those who thought that the last civilian supersonic flight was that of Concorde G-BOAF on 26th November 2003, it turns out it was actually 18th May 2021, when a Bombardier Global 7500 was (intentionally) taken to M1.015 during development testing for the latest Global 8000 business jet, which will have a maximum operating speed of M0.94. Bombardier claims that's the first business jet to go supersonic, and the first aircraft to exceed M1 on sustainable aviation fuel. News of the test was revealed at September's Society of Experimental Test Pilots symposium in Anaheim, California. □

(Bombardier)



FRIGHTENING OPERATING DAYS

Operating helicopters in congested urban areas is obviously a challenging experience at the best of times, but this pic shown by Upper Freeman Neil Jeffers of London's Air Ambulance during his Tymms Lecture (Report p30) shows just how challenging it can be... Look closely and you'll see a garage sign loosened from its (Blu Tack) mountings by rotor downwash passing perilously close to the blades – as if landing on a city-centre garage forecourt wasn't a demanding-enough task... □

(London's Air Ambulance)

LONDON CALLING...

What was distracting the Master-Elect during the Lord Mayor's Show on 12th November, as the Company's banner party of Assistant Steven Durrell, the Master-Elect and Warden Elizabeth Walkinshaw passed in front of the camera of PM David Mauleverer? The suggestion is made that he was talking to Air Traffic Control, or maybe just arranging for the banner to be flown above next year's parade by a drone? □

(David Mauleverer)

