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JANUARY - MARCH 2020

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The space issue



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Welcome

Happy new year. Happy new decade. We hope you enjoy this themed issue of Air Mail – focusing on space. We feature the RAF's re-formed 11 Group and show its extensive and growing role defending the nation's interests in space and cyberspace. We're reprinting a fascinating article from 1947 on the (im)possibility of leaving the earth's atmosphere – by a young Association member called Arthur C. Clarke. He later became the best-selling science fiction writer. You'll also find a digest of the Chief of the Air Staff's space and technology-themed first public speech, news of the Association's StaRRship partnership with Rolls-Royce which won a 2019 Women in Defence Award, and more about space threaded through the whole issue.

For the first time, we are publishing stories of the amazing work of the winners of the January 2019 National Presidential Awards and, in another new feature, will be focusing on the work of a particular branch: this issue, it's RAF St Mawgan Branch in Cornwall.

Along with your Association news, stories of the lifesaving difference members are making for the RAF family and regular features, you'll have plenty to keep you going until spring. I can only suggest that you bake the cherry cake recipe from Flowerdown House Hotel chef Amanda Gilmore, and settle down for a good read.

Annie O'Brian
Editor

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Cover image: An Airbus artist's impression of a British-designed Zephyr-S Unmanned Aerial Vehicle (UAV). The RAF has been running tests on the solar-electric, high altitude pseudo satellites since 2018. They will fill the gap between satellites and UAVs. © Airbus DS GmbH 2016

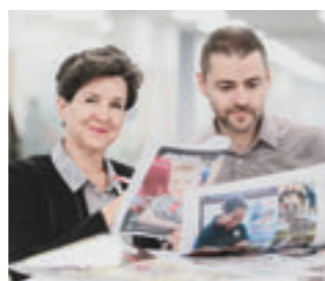
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STREET NEWS

NEWS pages

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All the latest from the Association and the RAF family, including: updates on Annual Conference 2020; a hatful of awards; an addition to the RAFAKidz family; new sponsors for 2020's flying scholarships; and news from the Association's inaugural Research Symposium.

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In 1947, a young RAF veteran wrote a piece for Air Mail on the possibilities of escaping the bounds of earth, interplanetary travel and the likelihood of colonising the moon. Arthur C Clarke went on to become one of the world's best-known science fiction writers, and his article is reprinted here.

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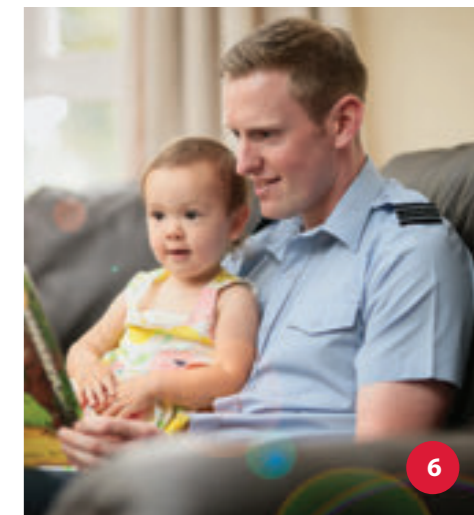
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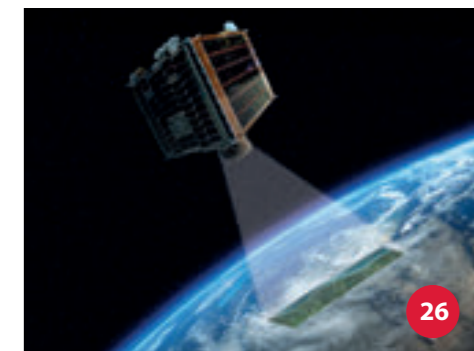
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The charity that supports the RAF family



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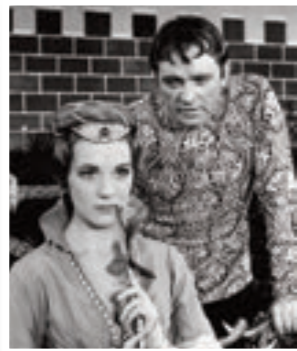
... your letters and emails to Air Mail and our readers



Famous faces

I was called-up in 1953 and joined 104 Course as a trainee pilot, with some of the happiest times of my life spent 'squarebashing' at RAF Kirton in Lindsey. I couldn't have joined a more agreeable bunch, one of whom was Tony Walton, a charming and gifted artist who later became a famous stage designer. He would proudly show us a photo of his girlfriend who he later went on to marry: a young lady called Julie Andrews.

John Read



Julie Andrews as Queen Guinevere, alongside Richard Burton's King Arthur in the musical Camelot, c.1960. Public Domain

Famous Faces 2

In the 1950s I was stationed at RAF Folly in Pembrokeshire. The technical team were myself and six radar mechanics who shared a wooden hut with a few GEE operators – one of whom was a rosy-cheeked young lad who spent most of his free time drawing cartoons. Many evenings were spent sat around the stove, surrounded by scraps of paper covered in sketches. Their creator was the well-known cartoonist and illustrator Ralph Steadman (Punch, Private Eye, Rolling Stone Magazine etc.). I wish now that I had kept some of those scraps of paper!

Mike Forrow

Famous Faces 3

My grandfather, F. Dudley Hobbs, was in France during the First World War. In a letter he wrote while still there in 1919 he talked about visiting General Headquarters and being treated as a guest of 'A' mess. Also in the mess was Prince Albert – later King George V – or 'P.A.' as he was called. My grandfather wrote that P.A. said he'd been given permission to train as a pilot from his father, and that he'd arrange for my grandfather to be posted to Northolt to teach him. My grandfather was soon posted to Northolt for this very purpose, but unfortunately contracted scarlet fever and so missed his chance to teach the future king how to fly!

Lucy Bulpin



F. Dudley Hobbs beside his aircraft, 1919. ©Lucy Bulpin

Thumbs up or down?

At Cranwell in 1951, as Ensign to the King's Colour, I was taught the correct way to carry a Colour or Standard, namely with the thumb of the right hand pointing up. You just have to look at Trooping the Colour and other military parades to see this - and also at the way other ex-service organisations carry their standards. I have never understood why so many Association standard bearers have adopted the uncomfortable and impractical hold with thumbs down.

When selecting a winner of the new standard bearer trophy, I suggest that the judges should immediately give the thumbs down to all those who don't have their thumbs up.

Wing Commander Fred Hoskins OBE

Guinea Pig Doug

Following the article on Doug Vince (July issue) I popped into the McIndoe Museum in East Grinstead and found Doug's name on the Roll of Honour. East Grinstead was nicknamed 'the town that did not stare' after McIndoe encouraged his patients to get out and mingle despite their horrifying injuries. Interestingly, in 1948 my brother was a medic on an RAF hospital ship (the 'Lancaster' I think) travelling to China where he had to administer saline baths – as pioneered by McIndoe – to badly burnt patients.

Philip Cohen, Ex Acting Corporal



© Philip Cohen

Tin men

[Regarding last issue's letter by Ieuan Williams]. In 1943 I was an LAC waiting to continue my flying training. After morning parade it was wise to avoid postings to local airfields to help 'bomb-up' the Lancasters for their raids on Germany, so I volunteered to be put in charge of the 'tin room' of the officer's mess - a job nobody wanted. This meant I was unavailable for posting. Each morning I marched my volunteers – my tin men – to the Officers' Mess. Most disappeared over the wall en-route to spend the day in Manchester but I always had a few left. My reward was officers' leftovers; liver, kidneys and many other goodies, and a relaxed day in the company of the WAAF cook. I was also introduced to the officers' sport of fencing. If I hadn't been 'top tin man' I would never have become a member of the RAF fencing team. Long live the tin men!

Kenneth Alwyn



Trevor (centre) and friends at RAF Buckeburg, 1947. ©Trevor Simmons

Berlin Airlift

Regarding the Berlin Airlift article in the last issue, I remember being posted to RAF Buckeburg in Germany in September '47 as an electrician before being flown to RAF Melle about 40 miles away. This airfield was for General Robertson's personal flight. There were about 20 of us and on 18 June '48 we were informed of 'hassle' with the Russians. All demob was put on hold and we had to get all our transport serviceable by removing vegetation and starting engines which hadn't been run for a long time. We also had a visit from General Montgomery, who arrived in his shiny silver Dakota.

Trevor E.H. Simmons

Inverted chevrons

Wing Commander Dyer's letter in July's issue reminded me of standing on Hamburg Station late one night returning from UK leave in 1956, sporting my recently-acquired Junior Technician chevrons. As a small group of German airmen with an NCO in charge marched past, a command was given and they saluted me. With mixed emotions I returned the compliment. I later learned that German Air Force sergeants had single chevron rank insignia and that lower ranks saluted them; or maybe someone was having me on.

Robin Burton, ex RAF Sylt and Schleswigland

Winged traffic only

In 1944 I was an aircrew trainee posted to RAF Wigsley. Upon arrival we were issued with bicycles to make it easier for us to get around the airfield, and a sergeant led us on our bikes to the mess hall. The next morning, I set off alone for breakfast on my bike. Confident I knew the way, I turned down the path we had used the day before. I then had a strange feeling that this might not be the same route. Looking back, I saw a Stirling bomber coming in to land behind me! I quickly cycled onto the grass and saw someone waving his arms at me from the control tower. Naturally I received a heavy rollicking from the officer, who let me off when he realised I had never seen an airfield runway before. I often wonder what the pilot thought, and was lucky I was not put on a charge for endangering an aircraft!

Jason Massey

Jet Provost

The painting of Charles Thompson's Jet Provost in the last issue of Air Mail brought back very fond memories of my time working on these aircraft during my national service in the 1950s. At the RNAS Yeovilton Air Day in 2017 I saw a Provost parked alone. After speaking to the owners I was duly invited aboard. In the cockpit for the first time in 60 years, I could hardly recall how cramped we were together!

Aubrey Hawke

A century of service

My father James Mason was in the RFC, and my elder brother Jack went to RAF Halton to become an engineer 'brat' before serving 15 years at Hornchurch, Malaya and Wyton. Another brother, Fred, went to Cranwell radio and radar school, but was discharged through illness after 6 months. Yet another brother, Dick, served 23 years in RAF electrical and instrument stores around the globe, and his son also served 23 years. My sister Irene married an RAF cook, and my youngest sister Christine married an RAF radio and radar engineer. As for me, I was called up in February 1946 and served my 6 months as a flight mechanic. Adding all the years the Mason family has been involved with the RAF gives a grand total of 106; quite a number for one family!

Edwin James Mason

Ed. Can your family beat 106 years in the RAF? Let us know via the contact details below if so. You can also find out how to trace your RAF ancestors on p.50.



Koggala Lake, Ceylon, 1947. ©Norman Walter

Sunderlands

The last Air Mail is of special interest to me due to the marvellous Sunderland on p.28. At 14 I joined an ATC Squadron and remember the many weeks we spent with the RAAF No 10 Squadron at RAF Mount Batten. We were not allowed to fly in the Sunderland, but enjoyed taxiing on water. I joined the RAF in 1944 aged 18 as an Air Gunner on Lancasters, then was posted to RAF Koggala in Ceylon in 1945. Due to the shortage of civil aircraft we were permitted to carry civilian passengers in our Sunderlands; mostly Indian merchants flying to Penang and Singapore to trade goods. The photo shows three such aircraft on Koggala Lake. No swimming was allowed however, as the water was full of snakes and crocodiles!

Squadron Leader Norman Walter

To comment in or contribute to Air Mail please email airmail@rafa.org.uk. Alternatively, write to Annie O'Brian, Editor, Air Mail, RAF Association, Atlas House, Wembley Road, Leicester, LE1 3UT. Your correspondence should be clearly marked FOR PUBLICATION. The editor's decision on inclusion is final, and longer letters may be abridged due to limited space. Only submissions made by email will be acknowledged before publication.

A message for the new decade — from the President

As we move into a new decade it is fitting to take a moment to look at the challenges and the opportunities that lie ahead for our RAF community and, in particular, for the Royal Air Forces Association. Indeed, this issue of Air Mail is focusing on the future, and contains a particularly fascinating update on the RAF's innovative space and cyber programmes.

The outcome of last month's General Election and the continuing saga of BREXIT will of course have a significant effect on our community. And for our Association and its branches, the growing public focus on military charities and their purpose and management (as seen in last October's national media reports) will also have an impact. These are among the critical issues that we must individually and collectively be addressing as a matter of priority. The Association will continue to be a proactive organisation that, in particular, makes provision for the evolving burden of legislative oversight, fiscal reporting, governance, and public scrutiny.

The nation's fiscal position will be taut over the next decade. It is our duty to ensure that we make the most of the Association's resources for the betterment of all members of the RAF family. Indeed, the investment made in increasing the Association's fundraising efforts has already borne fruit; this will enable us to ensure that members of our RAF community who are in need - whether serving or veteran - receive the standard of care and support they need. I am delighted that the Association has already identified the threat to our veteran community of reductions in publicly-funded welfare services - and is planning to combat them. Focusing on the serving members of the RAF and their families, when Whitehall departments get squeezed, the MOD has to focus its expenditure on military output. While the Chiefs will do their best to ensure that serving personnel are looked after, I have no doubt that charities will need to provide additional facilities to thoroughly assure morale and welfare support on and off station.

In August, the nation will publicly recognise the 75th Anniversary of VJ Day and, in September, commemorate the 80th anniversary of the Battle of Britain. I am sure that, where we are able, all members of the Association will mark these events and take a moment to reflect upon the considerable commitments made by our forebears in bringing those awful conflicts to an end. While we now have only a few members who are veterans of World War Two, I look forward to joining with them and the close family members of those who served in the conflict but are no longer with us, to reflect upon and celebrate the sacrifices made by so many.

Not since WWII has the RAF been so constantly deployed on global operations and, across the generations, the need for support is becoming ever more complex. Demand for our services is increasing significantly. For the sake of everyone who needs our help, we must continue to evolve and innovate to meet these new challenges and remain at the leading edge of service provision. We must spend the next decade championing the best interests of the RAF family more strongly than ever before.

Air Marshal Sir Baz North
President of the RAF Association



NEWS Updates and information for members and the wider RAF family



Artwork from the launch of the StaRRship project. ©Rolls-Royce Defence

Space mission wins national award

An online project that uses space adventure to inspire young people to study science subjects has won a Women In Defence UK Award.

The StaRRship YouTube and social media campaign is a collaboration between the RAF, Rolls-Royce and the Royal Air Forces Association. It won the Science, Technology, Engineering and Mathematics (STEM) Award at the 2019 Women In Defence UK Awards.

The project, set up as part of the RAF100 celebrations, used young people's love of smartphone technology and online videos. One showed a distress call coming in from space, and created an exciting adventure showing what can be accomplished with technology and ambition.

StaRRship amassed more than 9,000 regular subscribers in just over a year, and videos produced by the team have had more than nine million views. The audience is diverse and a significant number of them are girls and young women.

Rachel Huxford, Director of Marketing, Fundraising and Trading at the RAF Association, said: "This is a great win for a marvellous online campaign which has helped to get a great many young people engaged in STEM subjects. We're very grateful to Rolls-Royce for their sponsorship and expertise and to the RAF for its invaluable support."

Air Marshal Sue Gray, Director-General of the Defence Safety Authority, who presented the awards at the December ceremony, said: "Tonight is not only a celebration of these extraordinary women, but of how far women in defence have come. Defence needs to recruit and retain the best talent to remain at the forefront of innovation across so many emerging technologies."

The StaRRship project recognised that girls sometimes do not believe they could have a career in STEM. Jennifer Quigley-Jones,

chief executive of social media partner Digital Voices, knows about operating in a male-dominated environment. The YouTube channel she conceived included engaging visuals and storylines to make STEM feel more fun, creative and accessible to girls — as well as video from strong female role models such as Squadron Leader Bonnie Possel, a space medicine specialist.

Dave Gordon, Senior Vice President of Rolls-Royce Defence, said: "We're absolutely thrilled that StaRRship has won the award and would like to thank all our working partners who took part in this project. Our aim was to inspire young people to use today's technology and tomorrow's imagination to power future innovation."

"Rolls-Royce has been partnering with the RAF to pioneer innovation since it first took to the skies in 1918. We wanted to embrace that spirit of innovation and use it to inspire budding engineers and pilots."



(Left to right) Jennifer Quigley Jones, founder of Digital Voices, Air Marshal Sue Gray presenting the award to Alexa Clayton, Programme Lead for Rolls-Royce Defence, and Cate Driscoll, Special Projects Manager for the RAF Association. ©gleephotography.co.uk

Awards hat trick on the cards?

As Air Mail went to print the Association was waiting to hear results of two other national awards. Both finalists are in the Markel 3rd Sector Care Awards: Nick Rickwood, Manager of Flowerdown House Hotel, is a finalist in the Leadership Award and Bob Hingston, Chairman of RAFA Housing Ltd, is shortlisted in the Making a Difference category. We look forward to letting you know in future issues if the Association has bagged an awards hat trick.



Nick Rickwood, finalist in the Markel 3rd Sector Care Awards. © Phil Greig

New Year's NPC winners announced

Congratulations to the winners of National Presidential Certificates for new year 2020, announced here. They will be invited to receive their certificates from Air Marshal Sir Baz North, President of the Association, at Annual Conference this June.



Eddie Mansfield (second from left), carrying his branch standard at the Association's 2017 Service of Remembrance. © Phil Greig

Eddie Mansfield, Vice Chairman, Wrekin and Wellington Branch
For services to his country and to his local veteran and youth communities over 50 years.

Eddie has been involved with the RAF Association since 1984, as standard bearer and chairman at the Wrekin and Wellington Branch. He is currently vice chairman and is widely credited with saving the branch from closure.

Since serving in the Royal Navy, Merchant Navy, Royal Air Force, and Territorial Army, Eddie has volunteered for the Sea Cadet Corps and the Air Cadets (where he is still a civilian instructor). He is also the founder and administrator of two successful armed forces' and veterans' breakfast clubs in Telford.

He has carried a standard at more than 60 funerals in the last year and parades on a number of other occasions, such as the Birmingham Military Tattoo. At funerals he provides families with the reassurance that their loved one is still part of the RAF family no matter how long ago their service.

Please call 0800 018 2361 for details of how to nominate a member or colleague for an award.



Flight Lieutenant James Traynor, reading to his daughter. © Phil Greig

Flight Lieutenant James Traynor, Senior RAF Association Liaison Officer (RAFALO), RAF Northolt
For exceptional logistical, marketing and fundraising support and services to the RAF Association.

Until December James was Deputy Senior Air Movements Officer at RAF Northolt and has led the RAFALO committee there since January 2019. He briefs station executives, plans membership drives and fundraising events and ensures the RAFALO team are ready to meet the challenges of the future. He recruited 17 serving personnel to support the Association's London Collection last September — the largest number from RAF Northolt.

As well as supporting the Association at national and regional events such as Battle of Britain Commemorations, James also fundraises at air shows and the annual London Wings Appeal collection. He volunteered to provide logistics and security for a fundraising WWI pageant during RAF100, which involved organising and catering for the needs of 800 VVIP/VIP guests on a privately owned airfield. James has appeared in promotional campaigns for both Storybook Wings and membership, and played a huge part in consolidating warehouse systems during the Association's move to Atlas House. He also supports Association Ambassadors and signposts potential corporate supporters.



The Reverend Gordon Unsworth, receiving the Stars and Stripes from the United States military. Photo provided by Sheffield Branch

Reverend Gordon Unsworth, Vice-Chairman, Sheffield Branch
For serving as Padre and Chairman of Sheffield Branch through sickness and health, while organising Battle of Britain and Mi Amigo Services.

Gordon has been padre of Sheffield Branch since taking up the post in 1994. In 2004 he took over the duties of branch chairman and secretary which he fulfilled until he became unwell in 2011. He has been responsible for the organisation of the service and parade at Sheffield Cathedral for Battle of Britain and Arnhem commemorations.

Every year since 1994, he has organised and led the church and Endcliffe Park remembrance services for the crew of the USAAF B-17 Flying Fortress, Mi Amigo. In 2019 he took part and met the local dignitaries while recuperating from a hip operation.

This year the American military presented Gordon with the Flag of the United States of America in recognition of the dedication shown by Sheffield Branch to the memory of the Mi Amigo crew. This flag will be held in Sheffield Town Hall and flown every year at the Remembrance Service in Endcliffe Park.

Pride in Preston

The Preston Wings Centre has been honoured with a Royal British Legion Regional Award. Its befriending service and its range of activities for the RAF and armed forces communities and their families – particularly those with dementia – were recognised.

The Support to the Armed Forces Community Award was given to the centre for hosting the Legion's Admiral Nurses' monthly drop-in support group.

Centre Manager Bryn Williams said: "With the help of our great team of volunteers we do as much as possible to make the sessions enjoyable and successful.

"We have arranged wellbeing sessions which provide facials and hand massages. One of the guests, in his 90s, was enthused over how relaxed he felt and how smooth his hands were.

"We've organised singers of wartime and old-fashioned songs. It's so uplifting to watch those who have lost much of their memory be able to sing all the words to the songs.

"We've even had a fiddler come along and liven things up and we regularly welcome Queenie, a wonderfully attentive and caring therapy dog.

"I am immensely proud of this award from the RBL and their Admiral Nurses, who themselves provide such a great service to those with dementia and their carers."

Main picture: Queenie the therapy dog.

Top left: Packed sessions at the Preston Wings Centre.

Bottom right: Relaxing hand massages for veterans.



all images ©RAF Association



Serving suggestion: Christmas goodies for RAF personnel deployed away from their families. ©RAF Association

A leaflet packaged with the box promotes the Association's Storybook Wings and Wings Doodle Packs. ©RAF Association

(Away from) Home Alone

RAF personnel deployed in the UK at Christmas have been specially remembered by the Association.

Charities, individuals and organisations have always thought of RAF personnel deployed overseas during Yuletide. But those deployed in the United Kingdom, far away from their families during the festive period, have rarely benefited from the kind thoughts of others: until last year.

In 2019, 484 Christmas boxes were sent to personnel deployed in the UK by the RAF Association. Goodies inside included gingerbread Santas, candy canes, a RAF Association mug, water bottle and pen, luxury Tiptree jams, a festive biscuit cutter, a pilot key ring, a bath duck and a Christmas decoration — to bring cheer to on-duty personnel while at work for their country.

"We worked with RAF High Wycombe and stations across the UK to let service personnel on operational duty in the UK know they were not forgotten," said Beth Hartshorne, Welfare Projects Officer at the Association. "We were also really pleased to send a small number of boxes to British personnel in the United States who had been overlooked by other Christmas schemes."

Remembering The Battle of Britain

The 80th anniversary of the Battle of Britain is on the horizon and Air Mail is looking to commemorate the event by publishing members' memories.

Whether you served as air or ground crew during the battle, worked in the factories producing parts, were behind the scenes ensuring the RAF was always one step ahead, or watched aircraft fighting overhead as a child, we're interested in your memories. If you have a cherished family memento of the battle such as a letter or diary from a relative involved, or an object related to the conflict please do get in touch.

Similarly, if you have any photographs or other images you would be happy to share, you can email or post them to us. We would like to use them in the July issue of the magazine. Please also include a note with a few details where possible, such as when and where it was taken and who or what is shown. For copyright reasons these images must be yours to share. Any photographs posted will be returned provided an address has been given.

To contribute, simply send three or four sentences of your most vivid memory relating to the battle to the email or postal address below by 15 May 2020. Please write FOR PUBLICATION on anything you submit, and don't forget to include contact details. Dependent on the number of responses, Air Mail may not be able to print all submissions.

Please send your memories and photographs to airmail@rafa.org.uk, or by post to: Air Mail, RAF Association, Atlas House, Wembley Road, Leicester, LE3 1UT.

Scanning the skies, with St Paul's Cathedral in the background.
©U.S. Information Agency



Top: Seeing action in the II Group Bunker.
©MOD/Crown

Middle: Awaiting the call in the Officers' Mess, RAF Fowlmere. ©MOD/Crown

Bottom: Drilling for victory. Public Domain

Celebrity charity day funds wellbeing project



Members of the RAF family will benefit from a new mental resilience course this year after ICAP chose to support the Association during their 2019 Charity Day.

City of London-based ICAP is part of the TP ICAP group, the world's largest interdealer broker. Its December charity day – supported by royalty and celebrities – raised millions globally for organisations across the planet.

Through the project, families of RAF veterans and serving personnel, RAF veterans and those working alongside the RAF family on units will be able to raise personal awareness of well-being and understand the value of positive mental health.

A bespoke training course will meet their specific needs. Created in partnership with the RAF's Robson Academy of Resilience, it is expected to launch at the end of February. It will be quality marked from AIM and will be available 80 times at locations throughout the UK during 2020.

Nick Bunting, Secretary General for the RAF Association explains: "Training raises learners' awareness of mental health conditions, including their signs and symptoms. Once trained they have a better understanding of where to find information and professional support and are more confident to help themselves and those around them experiencing a problem or crisis."

"The military is working hard to reduce stigma by raising awareness of mental health issues," Mr Bunting continued. "Our ICAP-funded project should complete the circle, by strengthening the support available for the non-serving RAF family."

Keep an eye on our website at rafa.org.uk to find out when you can register your interest.

2020 vision

Looking forward to longer, lighter, sunnier days, we focus on some of the events, airshows, commemorations and link ups coming up in 2020.

The major action for most people with an interest in the RAF will be the commemoration of the 80th anniversary of the Battle of Britain. Taking many forms and being run by hundreds of different organisations, it will spread over summer and early autumn and build to a peak on Battle of Britain Day on 15 September. Air Mail will be commissioning special features to mark the event; branches such as Erewash are planning link ups with local primary schools and a service in Derby Cathedral. From 1 March to 31 October, the RAF Museum will be loaning artworks and artefacts from their national Battle of Britain and WWII collections to regional museums and galleries – look out for them in your area. The Imperial War Museum is putting on the 80th anniversary

My - you've grown already!



Nick Bunting (back, centre) and Elaine Tomlinson (second from right) from the Association's Headquarters with the RAFA Kidz Cranwell team and Group Captain Gordon Bettington, Acting Commandant of RAF College Cranwell.
©RAF Association

Another children's nursery has joined RAFA Kidz, the Association's nursery subsidiary which delivers preschool childcare on RAF stations.

The nursery at RAF College Cranwell joined RAFA Kidz in October 2019, hot on the heels of RAFA Kids Odiham which was launched in July 2019.

The new nursery approached RAFA Kidz to take on their management to ensure future sustainability and the continued provision of excellent care.

"Future-proofing quality affordable childcare and early years training for staff at the nursery is extremely important to us" said Nikki Batt, nursery manager at RAFA Kidz Cranwell. "We look forward to working under the RAFA Kidz umbrella and continuing to support our families for years to come."

Additional income generated by the nursery will be invested for its future and in RAF welfare activities such as free station wi-fi, Storybook Wings and childminder training.

For more information about RAFA Kidz nurseries, visit www.rafa-kidz.org.uk

Duxford Battle of Britain Air Show, and of course there is the Association's Battle of Britain bath duck to search out! (see page 10).

Away from the Battle of Britain there will be other celebrations: a special concert at Lincoln Cathedral on 29 October will mark the centenary of RAF College Cranwell – save the date and look out for news of tickets going on sale – and, earlier in the year, the 75th anniversary of VE Day will be marked by many in the armed forces.

Have a great year.



The Battle of Britain as depicted by Eric Fraser; just one of the RAF Museum artworks that will be on loan to local museums and galleries in 2020.
©RAF Museum

Can hawks help combat rogue drones?

Hunting flight paths of captive Harris' Hawks were studied during the research. © Shutterstock



Oxford University zoologists have discovered that hawks' pursuit of prey uses mixed guidance law, with implications for capturing rogue drones in cluttered environments.

Harris' Hawks steer their pursuit of evasive prey using a feedback system that differs fundamentally from the missile-like interception system of falcons. The new study led by scientists at the University of Oxford's Department of Zoology was published in Nature Communications. This mixed guidance law allows hawks to pursue agile prey through cluttered habitats without being thrown off the pursuit by the prey's erratic escape manoeuvres.

Falcons are known to intercept prey using the same guidance law as homing missiles, called proportional navigation. This is optimal against smoothly-moving aerial targets but is prone to being thrown off by the zigzag manoeuvring of terrestrial prey like hares or jackrabbits, and will not necessarily lead to a feasible flight path

through the cluttered habitats that hawks frequent.

The researchers found that Harris' Hawks use a guidance law in which their turn rate is determined by feeding back information on the angle between the direction to their target and their current flight direction, together with information on the rate at which the direction to their target is changing. They argue that this mixed guidance law reduces the risk of overshoot in the birds' close pursuits.

They expect the findings may have applications in the design of machines for pursuing and capturing rogue drones in cluttered environments, such as at the 2018 Gatwick Airport incident.

'Hawks steer attacks using a guidance system tuned for close pursuit of erratically manoeuvring targets' can be read in Nature Communications at: bit.ly/HawksDrones

Beware! Moustachioed ducks



Design concepts for the new fundraising duck. ©RAF Association

Attention duck collectors. The design of the Association's 2020 fundraising bath duck has now been finalised.

The exclusive 2020 keepsake will feature a moustachioed duck dressed in a leather flying jacket, helmet and white scarf, and in control of an RAF Association-branded propeller aircraft – all to commemorate the 80th anniversary of the Battle of Britain.

Squadrons of the collectors' items are due to arrive at Association Headquarters in early 2020. When stocks arrive, individual collectors will find the ducks at rafa.org.uk/shop, and branches can submit bulk orders online by logging on to rafashop.com or using the bulk order forms when they are sent out in the January Community Fundraising newsletter.

Trophies Reunited



Can you help us reunite disused trophies with donors or longstanding winners – such as the Summer Darts Trophy (centre), awarded between 1973 and 1985? ©RAF Association

The Association is appealing for help from members to reunite out-of-use trophies with their donors or with longstanding winners.

Following significant reviews of the Association's awards systems in 2017/18/19, there are a number of trophies that are no longer awarded. Many were donated to the Association over the last eighty years, but records of their provenance were not kept. Names on trophies include Vera Marriot, David Fellows, Thomas Bestwick and Alfred B Coley — and many more.

If you know of a trophy that was given by an individual, family or organisation and believe they may be interested in reclaiming it, please let us know. Similarly, if your branch was a multiple winner of a now disused trophy and wishes to bid to display it permanently in your local trophy cabinet, please make enquiries. Preference will be given to returning the trophies to their original donors, particularly when they were memorial gifts.

For a full list of the trophies and further information contact kelly.brotherhood@rafa.org.uk / 0116 268 8770.

2020 Conference Gets Talent



In 2019 they had members standing and cheering in the aisles and were hailed as 'the next Britain's Got Talent' - and this year they are coming back. The RAF Air Cadets National Choir will perform again at the gala dinner at Annual Conference 2020.

Perfect harmony: one of the Air Cadet National Choir's barbershop numbers in 2019. ©Heidi Burton

Bookings are now open and a new 'non-residential attendance' option is also available for only £100. While only branch delegates can vote during Conference business, all members are warmly welcomed to attend the whole event.

Date: 26 to 28 June 2020

Location: Grand Hotel Blackpool, North Promenade Sea Front, Blackpool, FY1 2JQ

Details:

Friday 26 June: Arrival from 3pm. Informal social evening from 6pm.

Saturday 27 June: Conference will start at 9am. Gala Awards Dinner in the evening.

Sunday 28 June: Sunday service/Armed Forces Day celebrations

Costs:

Residential Attendance – two nights' accommodation (Friday and Saturday), breakfast and lunch on Saturday and Sunday and evening meals on Friday and Saturday. The Saturday evening meal will be a three-course gala dinner. Tea and coffee throughout the weekend is also included.

Single: £252

Double: £333

Non-Residential Attendance: £100 (includes Saturday lunch and refreshments, Gala Dinner and Sunday lunch/refreshments)

For booking and further information visit

rafa.org.uk/annual-conference

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Razors down - for charity

Hair-raisingly close – inspection of 1 Squadron RAF Regiment's charity beard growing contest. ©MOD/Crown 2019

The 2019 change to the rules governing the growing of beards in the RAF stimulated the charitable imagination of servicemen at RAF Honington.

Members of 1 Squadron RAF Regiment took on the challenge of growing beards for charity, with 150 of them donating as they signed up for a permission chit to put down their razors.

A tense judging session was held at the end of the 14-day growing

period as each beard was closely inspected by the Deputy Squadron Commander, Flight Lieutenant Liam Summerfield, and Squadron Warrant Officer Shaun Noble. Facial hair was judged for minimum length to be spared the razor – and there were some close shaves.

Each of the squadron's four flights put a nominee forward to be judged 'best beard'. The prize went to Lance Corporal Glen Lewis from HQ Flight who donated his £60 prize to the £500 that the event raised for the Remembering Peter McFerran Charity.

100th birthday

Swansea Branch celebrated long-standing member Fred Jeacock's 100th birthday by organising a flight in an RAF Grob Tutor and lunch in the mess at RAF St Athan.

The celebration was made possible thanks to the support of the Universities of Wales Air Squadron at RAF St Athan and Squadron Leader Richard Elford and his staff.

Fred joined the RAF in March 1939 and trained as a balloon operator. When balloons were mechanised and handed over to the Women's Auxillary Air Force in 1943, he applied to be air crew and took the engineer's course at RAF St Athan.

After qualifying he was posted to the Canadian 431 Squadron as a flight engineer where he flew in Lancasters, completing 30 operational sorties by September 1944. Fred was then posted to another station as a flight engineering instructor. Having reached the rank of Flight Lieutenant, he became Adjutant at RAF Binbrook and RAF Loughlin at Weston-super-Mare. He turned 100 in September 2019.



Fred shaking hands with Squadron Leader Richard Elford. ©Richard Elford



Giving the gift of flight

2019's scholarship winners meet the then Chief of the Air Staff Sir Stephen Hillier at the Association's Annual Conference. ©Heidi Burton

Could you or someone you know be a 2020 flying scholar?

Kenley and Caterham Branch have stepped forward as a sponsor for 2020's flying scholarships programme. The James Rao Live Your Dream Foundation and the Air Crew Association Archive Trust are also being joined by existing sponsors MBDA to help make 2020 another impressive year for the scheme.

So far, the Live Your Dream Foundation has confirmed it will sponsor one 35-hour and one 12-hour scholarship, with defence company MBDA sponsoring three 12-hour scholarships and the Air Crew Association Archive Trust also sponsoring two 12-hour places over the next five years. Kenley and Caterham Branch will also make its first foray into sponsorship by committing to fund one 12-hour scholarship for at least the next five years, and discussions are ongoing with other potential sponsors.

"In August 2018, Audrey Eldridge – branch president and founding member – passed away aged 92" said David Meanwell, chairman of Kenley and Caterham Branch. "We wanted to establish a suitable memorial for this wonderful lady who, over very many years, had done so much for the Association. With the imminent return of 615 Volunteer Gliding Squadron to the local airfield at RAF Kenley, and our close association with several local RAF Air Cadet Squadrons, the creation of the Audrey Eldridge Memorial Flying Scholarship seemed ideal."

Applications for 2020 flying scholarships are open until midnight on 29 February 2020 for air cadets and others who have supported the Association. Terms, conditions and application forms can be found by visiting: bit.ly/Flying2020

Top dog

RAF Police patrol dogs and their handlers competed to become the 2019 RAF Military Working Dogs Trials Champion in September, with RAF Akrotiri's Corporal Christopher McLean and his dog Saaid coming out on top.

The competition saw four teams put through their paces in three different disciplines: wind scent exercises, obedience and obstacles, and criminal workouts. Among other awards handed out on the day was the Prestige Trophy – given to the best RAF Police Military Working Dog Section – which was won by RAF Coningsby.

The event also included a capability demonstration from Number 1 (Tactical) Police Squadron and a display from the RAF Police Dog Demonstration Team.



Above: 'Harrier' from RAF Lossiemouth, placed third in the competition and was trained by RAF Association member Corporal Laura O'Brien-Bunn. ©MOD/Crown

Left: Winners Corporal Christopher McLean and Saaid. ©MOD/Crown

New employment and business support for serving families



RAF spouse, Suzy Ives presenting to Johnny Mercer MP and an audience of 120 at the House of Lords. ©RAF Families Federation.

Forces Families Jobs

Look out for more support from Forces Families Jobs. ©Families Forces Jobs

Two projects to support employment for partners and families of serving personnel have been launched with input from the RAF Families Federation in the last few months.

Forces Families Jobs launched at Palace of Westminster

The House of Lords was the setting for partners, spouses, Armed Forces leaders, stakeholders and a selection of businesses as they celebrated the successful launch of a new, free online jobs and training website last September.

Forces Families Jobs is the go-to place for family members of serving UK military personnel. This includes sons and daughters from the ages of 18-25. Users will find employment opportunities with forces-friendly organisations and also training and career support such as CV writing and interview preparation. Information on business start-up programmes, volunteering opportunities and funding for training, career events or insight days are also available.

The new tri-service jobs and training website went live in September and has been very positively received. At the time of writing, more than 3,500 job vacancies were being advertised by in excess of 300 UK and overseas employers. Maria Lyle, director of the Families Federation said: "The numbers are expected to grow, as there are 3,970 Armed Covenant signatories who have pledged to support spouses. We still have lots of work we can do with them."

Forces Families Jobs has been supported by the RAF Association and other partners: Annington Trust; Army Benevolent Fund; Army Central Fund; Broadbean; Defence Relationship Management; Manpower Group; Royal Navy and Royal Marines Charity; and the University of Wolverhampton

Further information is at forcesfamiliesjobs.co.uk.

Remote workers get support on station

The RAF Families Federation is also working with the Military Coworking Hub Network, to support the development of hubs on military units to offer spaces for partners and spouses who are self-employed or working remotely. One hub is already running at RAF Leeming, and a second is due to go live at RAF Brize Norton, to help workers meet, network and reduce the isolation of home working.

The hubs can also be used by people who are studying for academic or professional qualifications through distance-learning, or job seekers completing applications and researching the local job market.

One beneficiary at RAF Leeming said: "It makes such a difference having somewhere you can go to work for yourself, that's away from your quarters. And it's so nice to have somewhere to make friends in a professional capacity, and focus on me as an individual and not as a wife or mother."

Further information is online: militarycoworkinghubs.com.



Linking up with the Military Coworking Hub Network to help independent workers. ©Military Coworking Hub Network

Helping the funds go further



Have you thought about switching to Direct Debit to pay for your membership? The system cuts down on administration, saves money, and is the simplest, most secure and most convenient way to pay. It's also quick and easy to set up.

"We are not increasing membership fees for 2020. But we will be able to release more money for our essential welfare work if we can reduce the administration costs of renewals for more of our 74,000 members," said Kerry Hamilton, Head of Membership. "With Direct Debits we can ensure that more of our funds are directed to supporting serving and veteran members of the RAF and their dependants," she added.

"Switching to Direct Debit is also better for the environment (no more paper, printing or postage). And once it has been set up, you don't need to do anything further because the payment will automatically be collected from your account," she continued.

The RAF Association has grown by more than 30,000 people since 2014. "This rejuvenation and continued growth is great news," says Kerry. "Each Air Mail reader is now one of more than 74,000 members who benefit from our network and camaraderie, and who support our vital welfare work."

Subscriptions:

2020 subscription costs have been held at 2019 rates.

Membership Class	2020 Fee	2020 Rebate ¹
Ordinary	23.00 ²	5.00
Ordinary 4 Year (legacy membership)	86.00	20.00
Associate	16.00	3.00
Associate 4 Year (legacy membership)	61.50	12.00
Non-Air Mail Associate	12.00	2.00
Non-Air Mail Associate 4 Year (legacy membership)	48.00	8.00
Minimum Branch Rebate	-	128.50

Notes:
1 Branch membership rebate (minimum of £128.50 from 2020) will be paid on an annual calculated basis regardless of 1 or 4 year membership direct to branches following receipt of F1056 and F1056A.

2 Monthly fees collected through RAF pay from service personnel under the Give As You Earn (GAYE) scheme will be calculated with a defined addition for tax relief.

"As our membership grows we must look at ways to keep costs down. It will make a big difference now, and even more by the time we hit our target of 100,000 members by 2030. Thank you for your continued support of the Association. It's great to have you with us."

Take care not to lapse

The grace period for the lapsing of your membership is one month. (Byelaw 7 (4). Membership – Subscriptions). So your membership will cease if the subscription has not been paid within the month after it is due. Of course, setting up a Direct Debit will also prevent this.

Annual / anniversary memberships

Joined before 1 January 2017? Your annual subscription will be due on the first day of January in each year.

Joined after 1 January 2017? Your annual subscription will be due on the anniversary of your joining. (Byelaw 7, Membership – Subscriptions).

Ways to pay once your renewal is due:

You can pay for your membership by card, cheque or Direct Debit. If you renew by Direct Debit you will save the Association money. It is also the simplest, safest and most convenient way you can pay. You can renew online at rafa.org.uk/renew or by calling 0800 018 2361.

Filling the fundraising gaps

Julie and Herbert Websdell, a married couple from Harleston in Norfolk, have been helping the Association by raising funds in otherwise hard-to-reach locations.

The pair are just one of an increasing number of volunteer fundraising groups, helping to cover fundraising blackspots across the country where no branches are active. At time of going to print, Julie and Herbert had raised more than £3,000 in 2019 alone.

"Volunteer fundraising groups are a great way of increasing our fundraising reach," said Hayley Wessier, the Association's Community Fundraising Manager. "Julie and Herbert only cover a small area, but

the funds they've raised so far are funds we would otherwise have missed out on."

If you would like to find out more about forming or joining a volunteer fundraising group, and live in an area with no active branch, contact Hayley Wessier at hayley.wessier@rafa.org.uk or on 0116 402 6453. Alternatively, if you would like to help fundraise for your local branch contact Pete Brocklehurst at peter.brocklehurst@rafa.org.uk or on 0116 268 8757.

Challenge 2020

Start the new decade with a bang by taking part in our exciting challenge events – and help raise funds for the Association at the same time. If you want to try something new, challenge yourself or just enjoy some memorable activities, let us help you on your way. Here are some of the great challenges you can take on this year



1



2



3



7



5



4



8

1. WINGWALKING

Join the world famous AeroSuperBatics Wing Walking display team and enjoy the views from a glorious 1940s Boeing Stearman biplane. Hear the engine roar into life and take to the skies for an exciting series of flypasts, zoom climbs, dives and banking turns. Minimum fundraising target: £650 plus registration fee. ©yourdigitalmemories.co.uk

2. LONDON LANDMARKS HALF MARATHON

The London Landmarks Half Marathon is a 13.1 mile run through Westminster and the city, taking in world-famous views and hidden heritage along the way. You'll start the race on Pall Mall before encountering some of London's iconic landmarks: Big Ben; St Paul's Cathedral; the London Eye; Nelson's Column; the Gherkin; the Shard and the Tower of London. Minimum fundraising target: £350 plus registration fee. ©London Landmarks Half Marathon.

3. RAFA RIDES: 2020

After the huge success of RAFA Rides: 2019, the event is back. Set up for serious cyclists (100 and 70 mile routes) as well as more leisurely cyclists (30 mile route), you can join hundreds of others touring the gorgeous villages and countryside of Rutland. Or join in with the 'virtual ride' from anywhere in the world. Feeding stations, post-ride beer and a hog roast are all laid on for you. Registration fees (per person): 100 & 70 miles - £35; 30 miles - £25; virtual riders - £25. ©yourdigitalmemories.co.uk

4. RAFA JUMPS

Live the life of an RAF parachutist for a whole day on a RAFA Jumps tandem skydive experience. You'll really get into the DNA of the RAF as you spend the day with friendly and enthusiastic professional instructors on interactive behind-the-scenes activities. Then tandem skydive from 13,000 feet and experience the pure adrenaline of freefall, and incredible views once your canopy opens and you peacefully float back to earth. Minimum fundraising target: £450 plus registration fee. ©yourdigitalmemories.co.uk

5. THE VITALITY BIG HALF MARATHON

Whether it's your first half marathon or your 50th, you'll be surrounded by brilliantly supportive runners and spurred on to achieve your PB. You'll pass the iconic Tower Bridge and the historic Cutty Sark in Greenwich and when you cross the finish line you can celebrate with your family, friends and fellow runners at the Vitality Big Festival. Minimum fundraising target: £300, plus £30 registration fee. ©The Vitality Big Half

6. NIGHTRIDER

Cycle beneath the stars with this exciting ride through Liverpool, passing the city's moonlit landmarks on the way. This isn't a race, so you'll be free to enjoy the scenery and take in the unique atmosphere. There are two distances to choose from, 50km or 100km, with food stations every 25km. A high-vis vest, bike mechanics and a GPS route file are supplied. Minimum fundraising target: £300, plus £30 registration fee. ©Classic Challenge

7. GREAT NORTH RUN

Be at the heart of the world's biggest half marathon when you run Gateshead's famous 13.1-mile course. Lined with thousands of supporters, you'll soak up the amazing atmosphere — from the iconic Tyne Bridge to the coast in South Shields. Register now to ensure you don't miss out on this extremely popular race. Minimum fundraising target: £450 plus registration fee. ©RAF Association

8. ULTRA CHALLENGE

If you're a keen walker, seasoned hiker or regular runner looking to test yourself, Ultra Challenge has 12 events to choose from. With distances covering 12km, 50km, and 100km you'll enjoy gorgeous views as you walk, jog or run at your own pace through stunning countryside. This event includes feed stations, route map, manned checkpoints and massage facilities for those covering more than 50km. Minimum fundraising target to be announced. ©Action Challenge

WILL YOU ACCEPT THE CHALLENGE?

Find out dates and much more at rafa.org.uk/get-involved/events or contact challenges@rafa.org.uk. We'll support you all the way, and the money you raise plays a huge part in enabling us to continue helping the RAF family.

Support and send off for surveillance veteran



Far left: Harold 'Lee' Tracey in uniform during the Second World War. Image courtesy of Nick Nicholson

Top left: Association volunteer Nick Nicholson, who befriended Lee in the final years of his life. © RAF Association



Left: Lee's coffin is carried into Emstrey Crematorium by serving personnel from RAF Shawbury, led by Master Aircrewman Jolly Archer. © RAF Association

When Association volunteer Nick Nicholson's befriended passed away, he was worried he'd be the only mourner at the funeral. After notifying the Association's head office and local branch, Nick set to work to ensure that veteran and life member of the Association Harold 'Lee' Tracey would have a fitting send-off.

Lee had joined the RAF in 1943, where he worked in intelligence at postings which included Egypt, India and Iraq. After leaving in 1947, he married singer and actress Maria Wagg and they lived together until her death in 1961. Professionally, Lee continued to be involved in intelligence. He invented a number of surveillance systems and devices, including the Scanlock Harmonic Receiver, worked for the security services until 1970, and then as a freelance consultant. In 1978 Lee founded the company Audiotel International, which is still a market leader in surveillance equipment.

When Lee became socially isolated in 2014, the Association stepped in to provide support. He was introduced to volunteer befriender Nick who visited him regularly for the next five years. The Association also helped Lee buy a new fridge freezer and TV, and go on a holiday at a Wings Break hotel. He died in 2019 aged 93, after a stroke.

Given Lee's isolation, Nick set about ensuring his funeral would be well-attended. Thanks to his efforts, and those of the Association's local branch, and an appeal orchestrated at head office, 150 people arrived to pay their respects on the day. Serving personnel from RAF

Shawbury also gave Lee a guard of honour and acted as pallbearers.

"Lee was a wonderful, highly intelligent gentleman whom I will miss tremendously", said Nick. "I'm so pleased we were able to give him this send-off".

Tim Potter, Chairman of the Association's Ellesmere and Oswestry Branch said: "Without Nick's hard work to bring Lee's situation to our attention this would have been a pauper's funeral, which Lee certainly did not deserve."

Thanks to the publicity the funeral received, Lee's long-lost nephew Samuel Brooks was also discovered; although too late to attend. Samuel had spent time in a children's home in his youth and had fond memories of his uncle Lee's visits. Speaking to the Belfast Telegraph, Samuel said "I remember we used to go out on a boat on the River Trent. He was a brilliant man, so intelligent and interesting to talk to... Not being there at the funeral has left me heartbroken.

"If I had known where he was I would have been there every day with him. He could have come and lived with me and my wife, and we would have looked after him because he gave me hope and a little joy when I had none in that children's home. And that meant so much to me."

Samuel now intends to ensure his uncle's ashes are reunited with those of his wife Maria.

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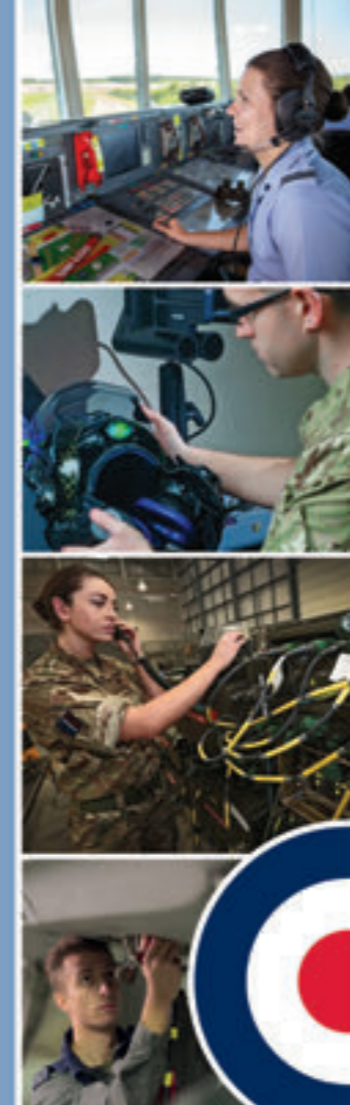
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RAF Anniversaries

- 50 years ago (1970)**
Mar 28: RAF Al Adem handed back to Libyan authorities.
- 75 years ago (1945)**
Feb 24: Tiger Force formed from squadrons in Bomber Command for the strategic bombing of Japan.
Mar 3: Last German fighter crashed on English soil in York near RAF Elvington.
March 6: RAF Regiment's 1307 Wing landed at Meiktila in Burma to defend the airfield during the three-week 'Battle of Meiktila Airfield'.
Mar 14: First use of the Grand Slam Earthquake bomb, dropped on the Bielefeld railway viaduct. The earthquake effect of the bomb collapsed the viaduct.
Mar 24: RAF tows 439 gliders to drop zones near Wesel in support of Operation Varsity; the push to cross the River Rhine.
Mar 29: The last V-1 rocket to fall on England shot down near Sittingbourne.
- 100 years ago (1920)**
Jan 1: RAF Police School established at RAF Halton.
Jan 15: RAF Rugby Union formed.
Feb 5: RAF Cadet College at Cranwell opened, with an initial entry of 52 cadets.
Mar 25: The wearing of field boots made optional for officers of all ranks.
Mar 31: Hugh Trenchard reappointed Chief of the Air Staff.

WINGS BREAKS HOTELS
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ROYAL AIR FORCES Association
The charity that supports the RAF family

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“John died for six minutes... suddenly turned upside down”



John and Tina Wren – back on track and looking to the future. ©Phil Greig

... and our lives were suddenly turned upside down”

When ex-pats Tina and John Wren visited their native Scotland in summer 2017 they expected to stay for just a few weeks before going home to Malta. But that suddenly changed when John suffered a near-fatal heart attack at a Hearts football match.

“John died for six minutes,” Tina said, “and if it wasn’t for a group of football fans who performed CPR on him in the stands, I’d have lost him. I was told he needed a triple heart-bypass, and I then realised we’d need to move back to Scotland permanently.



Tina and John meet up with (centre) Association Caseworker George Prentice. Tina says: “I don’t know what I’d have done without George and the RAF Association’s help.” ©Phil Greig



Edinburgh Evening News prints Tina’s thanks to the fans who saved John’s life. Reproduced with kind permission of Edinburgh Evening News.

“We were staying in temporary accommodation. John was to be discharged within a few weeks and needed a suitable place to recover. I didn’t know where to turn,” Tina remembered. They could not find a satisfactory place to stay, or any financial support. Fortunately, because of her time in the RAF, Tina was eligible for support from the Association, which quickly arrived in the form of caseworker George Prentice.

“This wonderful gentleman from the RAF Association turned up at the hospital, and things quickly started settling down” said Tina. “George took me to a local café, where I was able to tell him everything that had happened. He understood our situation and how urgently we needed help.”

George worked with the Association’s Malta and Edinburgh branches to support the couple’s relocation, and applied on their behalf for funding from other military charities including the RAF Benevolent Fund and Poppy Scotland.

“We helped the couple move all their possessions from Malta to Scotland, and relieved them of the burden of relocating” said George. “I made sure I was available to update and encourage Tina, who was feeling alone and vulnerable while John was recovering in hospital.”

George helped the couple to find a place to live in Stirling, and John made a full recovery.

“Our lives were turned upside down that summer” said Tina, “but thanks to George and the RAF Association we’re now back on track and looking to the future. It was the hardest thing I’ve ever had to live through, and I don’t know what I’d have done without their help.”

Preventing crisis for military dementia carers

The RAF Association and Alzheimer's Society have unveiled new projects that will lead to life-changing support being offered to serving personnel who are caring for loved ones with dementia.

The joint project was announced at the Association's inaugural Research Symposium in October 2019. The event brought together 68 participants from military charities, the Royal Air Force, the National Health Service and the Ministry of Defence, as well as researchers from companies and universities across the UK — for the first time.

The symposium followed the largest survey of its kind by a national military charity. The research, by the RAF Association, revealed the unique circumstances of RAF personnel battling to provide personal care for relatives from afar.

It shows there are increased pressures on carers serving in the RAF who are often deployed overseas or outside their home area, sometimes at short notice.

According to Alzheimer's Society, more than 112,000 people working across all employment sectors have had to give up their job in the past year, with many retiring early because of their caring commitments.

The RAF Association's Director of Welfare and Policy, Rory O'Connor, said the Association's work with Alzheimer's Society will help prevent a workplace crisis in the Armed Forces.

He said: "Very limited information was previously available that we could use to tailor key welfare services to personnel needs.

"Analysis of the results of our own 2018 survey of over 4,000 people showed that around 15 per cent of all respondents and 9 per cent of serving personnel who responded had an unpaid carer responsibility for someone with a health problem, with the most frequently cited condition being dementia.

"Of course, people who join the military understand that there will be challenges and sacrifices as part of their role, but life can change dramatically and beyond all recognition when an ageing parent is diagnosed with dementia.

"Suddenly, personnel working a long way from home can be faced with an impossible situation. Trying to co-ordinate or provide care from a distance, when you can't be there in person, can be agonisingly frustrating."

He added that permission given by the RAF for flexible working in many cases was helping tremendously, and both charities now wanted to build on employer support by providing bespoke welfare services for carers.



Joining Forces: the Association, Alzheimer's Society and RAF personnel launching trials of life-changing projects for dementia carers.

The project

A range of prototype initiatives were tested by RAF personnel at the end of 2019, with a view to rolling them out as quickly as possible. It is hoped these will provide a framework for other charities to use to support carers serving in the other Armed Forces.

They will provide a lifeline for those struggling with a care role or a relative's diagnosis, connect those with similar experiences and provide a safe space to share stories and access resources.

Launching the initiative's testing phase at the symposium, Association Secretary General Nick Bunting said the charity would be increasingly relying on research to tailor all of its services to beneficiaries' needs and feel less alone.

"In a fast-changing social landscape, it's more important than ever to fully understand the needs of the people we serve" he said. "The issues we have already identified in relation to carers in the RAF will, I'm sure, be relevant to all three of the Armed Forces, so our work with Alzheimer's Society could ultimately help many thousands of people for years to come."

To find out more or ask for support, contact welfare@rafa.org.uk or **0800 018 2361**.

Richard's story



Squadron Leader Richard Lewis, stationed at High Wycombe, has been involved in the RAF Association and Alzheimer's Society research.

Richard's father died as the result of Alzheimer's Disease, and his mother, Freda, was diagnosed four years ago.

Working together, he, his sister and their aunt have ensured that Freda, now 76, is cared for at an assisted-living centre in the family's native Newcastle. But despite the professional care his mother receives, Richard has found his support for her has an impact on his working life.

Richard, who has served with the RAF for 16 years, said: "I was actually considering leaving my job at one point because I was travelling long distances in order to take on my share of carer responsibilities alongside my sister.

"Fortunately, I was offered a more flexible working arrangement, so I have been able to stay with the RAF while supporting my mother." He said knowing the RAF Association and Alzheimer's Society were looking to support people in similar situations was hugely encouraging.

Rosie's story



Flight Lieutenant Rosie Brooks at the Association's October Symposium, describing the strain of caring for a relative with dementia.

Another research participant is Flight Lieutenant Rosie Brooks. Her mother, Dawn, was diagnosed with early stage Alzheimer's Disease in 2019.

The strain of trying to care for Dawn, who lives in Worcester, while serving in the RAF in Whitehall soon took its toll on Rosie. She said: "My whole life was flipped upside-down overnight. I found the social care system difficult to navigate, and I struggled to look after my mum properly.

"While the RAF has helped a great deal by enabling me to work flexibly, it's still frustrating to only be able to give mum a couple of days per week."

"I'm glad my experiences of being a dementia carer while serving in the RAF are being used to help others in similar situations. It's been a difficult time for me and my family, but hopefully something good can come out of it."

Congested and contested – space in the 21st century

Carbonite 2, a video-from-orbit satellite system from SSTL is designed to deliver images and high definition colour video clips at low cost. It will be used for strategic decision-making and to support the armed forces' operations and training.
© SSTL Beacroft Photography

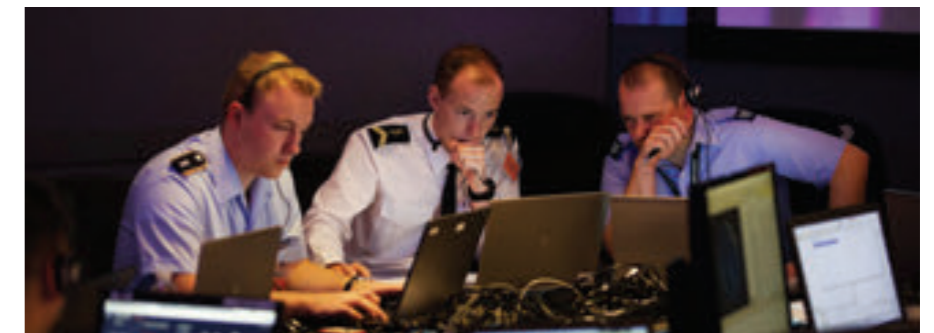
The Royal Air Force was formally made responsible for the UK's space operations in May 2018 and 11 Group was reformed that November to help bring on the Next Generation Royal Air Force. Now Air Vice-Marshal Ian Duguid speaks to Air Mail about the first year's work at 11 Group, threats to modern and future society, and why it's crucial to our everyday lives to defend the United Kingdom's interests in space.



Air Vice-Marshal Ian Duguid, AOC 11 Group.

In November 2018 the Royal Air Force reformed Number 11 Group – which famously defended London and the south-east against the attacks of the Luftwaffe during the Battle of Britain. Now based at RAF High Wycombe and headed up by Air Vice-Marshal Ian Duguid OBE, the group leads the RAF's response to new and evolving threats in the air, cyber and space domains as well as information activities.

Not only is the Group an essential part of the Next Generation Royal Air Force, it also coordinates the RAF's operational outputs with the British Army and Royal Navy – as unveiled at the Air Space Power Conference in July 2019 when former Secretary of State for Defence, Penny Mordaunt, announced the transformation of Joint Forces Command into Strategic Command. She said: "Today we're seeing state and non-state actors alike operating in that 'sombre' zone below the threshold of war, unconstrained by previously accepted norms and weaponising information to destabilise our societies and our support systems. If we're to respond, we must have strategic integration across the five war fighting domains - land, air, sea, space and cyber."



"We must have strategic integration across the five war fighting domains - land, air, sea, space and cyber," said the former Secretary of State for Defence, Penny Mordaunt. Here the United Kingdom's navy, army and air force join together in 2016 during Exercise Global Sentinel alongside seven other nations.

11 Group

The new 11 Group combines the capabilities of Air Command's Operations Staff with the Air Battle Staff, and includes the deployable Joint Force Air Component, the National Air & Space Operations Centre and the executive team. It also incorporates the Space and Battlespace Management Force.

AVM Duguid explains: "The senior leadership team of the Royal Air Force recognised the need to establish an organisation that would be able integrate air, space, information and cyber activities in the Royal Air Force and deliver a coherent effect and message. On a daily basis we experience activities that we would say are in the grey zone. And we need to be able to counter those activities and understand how we can exploit the grey zone against our adversaries."

understand how we can counter those threats. So 11 Group was established to bring coherence across those environments – either in isolation as an air arm because it's specifically an air challenge, or actually more probably, in the joint environment working with the land component and the maritime component and bringing a much more holistic group of effects to bear."

11 Group is made up of the RAF stations at Fylingdales, Scampton, Spadeadam and Boulmer and is managed from RAF High Wycombe (see info box on p29).

Lift off

Announcements from 11 Group have come thick and fast over the last year.

The most advanced project is the placement of an RAF test pilot in the Virgin Orbit programme. RAF Typhoon pilot Flight



Typhoon pilot, Flight Lieutenant Mathew Stannard, is expected to join the pioneering Virgin Orbit programme this year, to launch cutting-edge small satellites from a Boeing 747-400.

"The strategic context in the last twenty years has seen the rise of violent extremist organisations, and public media has portrayed UK armed forces deployed to counter the Taliban and Daesh. Violent extremism is a real threat to UK society and UK national interests. But equally what we are seeing is the rise of nefarious state actors who do not recognise the rules-based international system, and we need to

Lieutenant Mathew Stannard is expected to join the pioneering programme later in 2020 for three-year trials of Boeing 747-400 aircraft from which cutting-edge satellites will be launched. 11 Group's AOC says: "We see that as a win-win situation. It is about demonstrating our relationships and alliances with the commercial sector, recognising that the commercial sector absolutely has a vested interest in the

continued...



Personnel at the Control and Reporting Centre, RAF Boulmer, Northumberland. The centre is staffed 24/7. Among many other things it compiles the Recognised Air Picture within NATO Air Policing Area 1, and provides tactical control of the Quick Reaction Alert. It also supports students at the School of Aerospace Battle Management.

protection of their assets in space as well. And also the very fact that as an aviator in the Royal Air Force, that individual and the team around him will bring a lot of experience to bear in terms of the support to the Virgin mission."

Also launched is Team Artemis - a transatlantic group of UK and US defence personnel, set up to launch a small satellite constellation and undertake research into their wider military uses.

Announcing a £30m investment in July 2019, to launch the constellation, Penny Mordaunt said: "These small, low orbiting satellites can be sent into space more cost-effectively than their predecessors and can be fixed or replaced more quickly. The programme will eventually see live high resolution video beamed directly into the cockpit of our aircraft, providing pilots with unprecedented levels of battle awareness."

"The Artemis constellations involve small satellites because the technology we can put in there has become more affordable," adds AVM Duguid. "The same sort of technology equation applies to space as to the reduction in size of computers from the mainframes of the 70s to the concentrated power of today's laptops. We recognise also that there are some national capabilities and freedoms that we want to be able to ensure that we have. And Artemis is very much based on a coalition approach - we share the costs and we share the benefits."

And finally, there is Operation Olympic Defender which will be an international

coalition formed to strengthen deterrence against hostile actors in space and prevent the spread of space debris in orbit. It will see the UK send eight people to the Combined Space Operations Center in California to support this operation. "Olympic Defender is a broad coalition of willing and partner nations that have the same values that we all share," says 11 Group's AOC. "It is not an offensive concept of operations. It is a recognition of the contested environment of space. It's there to defend what we want to do, our freedom of action, our freedom of manoeuvre. It works in the same way that we have developed coalitions over the last 20 years as "coalitions of the willing" - where we've brought nations together to fight, for example, the Taliban in Afghanistan. There was a NATO mission there, but there was also a broader coalition with non-NATO partners as well."

Further into space

"The UK and specifically the Royal Air Force has been involved in space activities since manned craft have been put into space," says AVM Duguid. "RAF Fylingdales in North Yorkshire is an intrinsic part of a space surveillance capability working hand in glove with the US that was formed many years ago [1963]. Some of the readers of your magazine would remember the golf balls. It is no longer a golf ball, or a series of golf balls but a solid state phased array radar pyramid. What I think we are seeing today from very senior individuals in government and the Services, is the recognition that we now need to gear up more in terms of our activities in space. And while the Royal Air Force has a considerable role in dealing with

space matters from a defence perspective, it's not an exclusive preserve of the Royal Air Force. I definitely see a very close relationship between the Royal Air Force, and 11 Group in particular, and Strategic Command in how we command and control and how we operate."

"There are things that we take for granted for day-to-day activities. ATM machines in banks receive their timing codes from GPS. And when we talk about space it's not just applicable to activities and equipment in earth orbit, out in space. We have to talk to satellites, we have to talk to space vehicles, and clearly you've obviously got the example of equipment that is launched through air breathing space, can go up into space and come back down again. And we need to be able to protect that. There are global actors, particularly well known in the space field, that have produced equipment that will be able to render and deny our satellites and our space equipment."

Two issues in space are now of concern to the UK and its allies: congestion and a very contested environment. Congestion leads to accidental damage to space equipment. "Just even the tiniest of particles in space hitting a GPS satellite could render it unserviceable," explains No 11 Group's AOC, "And then clearly what we don't want to see is a domino cascade affair where a single bit of debris smashes a satellite and that then smashes out and it scatters around." The environment is also under competitive pressure: "If you wanted to undertake either intelligence gathering or even just surveillance - Google Earth for instance - then you would have a satellite in a lower earth orbit that spins around the earth," he adds. "It goes over a ground track and takes imagery or picks up intelligence signals. Those areas are being contested now for certain orbits and certain positions."

The threats are many, as he continues: "You could have electronic warfare. So if it was a communications satellite you could have another satellite of nefarious origins jamming it. Equally, an adversary might want to determine a hard kill and kinetically strike it from a land-based launch - fire a rocket at it for example. We recognise that we need to adapt and ensure we protect those critical assets that are essential for not only the delivery of defence output, but actually enable the freedom of movement of society that we've become accustomed to."

According to AOC 11 Group, the people needed for the Next Generation RAF are not so different to the personnel employed up until now: "We've had people in and around the space enterprise for many years, albeit quite a small cadre. So we've got a really good foundation, a really good platform from which to grow individuals. The Royal Air Force and the Chief of the Air Staff



Royal Air Force eyes, trained hundreds of miles above the Earth in September 2016 during Exercise Global Sentinel in Suffolk, Virginia. Coordinated by US Strategic Command, the exercise saw seven nations working in a combined Space Operations centre alongside commercial colleagues to improve space awareness and coordination.

recognise that from a training and education perspective we need to broaden what we have done so far and introduce much more around understanding of space as well as things like cyber and information activities. The new type of activities will complement capabilities such as traditional air power and the use of fighter aircraft, or heavy aircraft for resupply. So an activity in one domain such as the cyber domain could be countered by something in space.

In the same way that the 1944 D-Day landings had the amphibious and maritime assault, but also had air power over the beaches providing close air support, particularly to the Pathfinder soldiers that went in ahead in the Horsa gliders. It was a combined operation across all of the domains. It is no different to what we want to do in the future, but we now recognise that there is more to it than those three conventional environments. According to

AVM Duguid "the RAF is now putting in a training and education programme so that when the folk who come in to RAF Halton and RAF Cranwell start their education in the use of air power, they understand space power as well."

The space and cyber work of 11 Group's RAF Stations

RAF Fylingdales in North Yorkshire currently provides a continuous ballistic missile early warning service to the UK and US governments and is a key part of the Allied Space Surveillance Network - monitoring objects in space that can easily resemble incoming missiles when re-entering the atmosphere. The north Yorkshire station also supports the United States' developing Missile Defense System.

RAF Spadeadam in Cumbria, is the only Electronic Warfare Tactics facility in Europe where aircrews can practise manoeuvres and tactics against a variety of threats and targets that they face in contemporary warfare. The facility attracts aircraft from the Royal Air Force, Royal Navy, British Army and NATO forces. The survival of aircrews over Iraq, Afghanistan or elsewhere, and the soldiers on the ground who depend on air support, are affected by the training provided by RAF Spadeadam.

RAF Scampton in Lincolnshire hosts No 1 Air Control Centre. It provides the main operational unit for fighter controllers and aerospace systems operators in the RAF, playing an important role in the protection of UK airspace, and can deploy command and control capability anywhere in the world.

RAF Boulmer in Northumberland is a critical component of the RAF Battlespace Management Force and home to the Air Surveillance And Control System (ASACS). The Control and Reporting Centre at RAF Boulmer uses ground-based military and civilian radars to monitor, detect and identify all aircraft in and around UK airspace - 24/7, 365 days a year. RAF Boulmer is also home to the RAF School of Aerospace Battle Management, a worldwide centre of excellence on leading-edge battlespace management training and education for the UK Armed Forces, NATO and other foreign national military personnel.

The Outer Space Treaty

Formally known as 'Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies', this governs all activities in space.

In essence it says:

- Outer space cannot be subject to national appropriation by claim of sovereignty, by means of occupation, or by any other means.
- Nations and states shall not put nuclear weapons or other weapons of mass destruction in orbit, on celestial bodies (planets) or station them in outer space in any other way.
- The moon and other celestial bodies shall be used exclusively for peaceful purposes.
- Astronauts shall be regarded as the envoys of mankind.
- States shall be responsible for national space activities whether they are carried out by government or non-government entities.
- States shall be liable for damage caused by their space objects.
- States shall avoid harmful contamination of space and celestial bodies.

Read the treaty in full at: bit.ly/SpaceTreaty



INTO SPACE

By Arthur C. Clarke

To sit alongside this issue's focus on the future of the RAF in space, we are reprinting an early Air Mail piece written by young RAF veteran Arthur C. Clarke. Published in the February 1947 issue, it was partly a response to a lecture by W. G. A. Perring (Superintendent of the Royal Aircraft Establishment) on German long-range rocket development. Published 14 years before the first manned space flight, in this article Clarke ponders the possibilities of escaping the bounds of earth, interplanetary travel and the likelihood of colonising the moon. Clarke went on to become one of the world's best-known science fiction writers.

Arthur C. Clarke (1917-2008) was an engineer, futurist, Humanist and acclaimed science fiction writer. He joined the RAF as a radar instructor and technician from 1941 to 1946, was twice president of the British Interplanetary Society, and worked alongside Stanley Kubrick to create the film '2001: A Space Odyssey'. In recognition of his great influence, the geostationary orbit 36,000km above the equator - which Clarke first noted as useful for satellite communication relays - is named the 'Clarke Orbit' by the International Astronomical Union.

Mr. Perring's lecture on German long-range rocket development (described in AIR MAIL, October 1946), gave a fascinating glimpse of **The Shape of Things to Come.**

Perring revealed, that at the end of the War, the Germans were working on rocket designs to give ranges of 3,000 miles and speeds of over 8,000 mph. Such machines, if fired vertically, could reach heights of at least three hundred miles; indeed at this moment the altitude record for V.2 is well over a hundred miles.

After the lecture in the discussion that followed, Mr. Perring was asked if it was possible for a rocket to escape from the earth. He stated that a three-stage rocket, by dropping first one stage and then the second, could free itself from the earth's gravitational field and travel as a heavenly body.

Before the War prophecies of this nature had often been made by the few people who had seriously studied rocket propulsion, but these had usually been dismissed as wildly visionary. (Less than three years ago there were many who did not believe that rockets could cross the English Channel!) But even the most conservative must pay some attention to the Superintendent of the Royal Aircraft Establishment, and in this article we will examine in more detail the principles of flight beyond the atmosphere, and indeed beyond the earth's gravitational field.

5,000 Miles per Hour!

The rocket, as is now generally appreciated, is the only known form of propulsion which will operate in airless space. It is completely independent of a surrounding medium for support, reaction or oxygen. Those who find it difficult to understand how any thrust can be obtained in a vacuum should remember that V.2 was ejecting a ton of matter every six seconds—and ejecting it at a speed of 5,000 miles an hour! Clearly an enormous recoil must be produced, and once the tons of burnt gas leave the rocket it makes little difference whether they expand into vacuum or atmosphere. Actually there is a slight increase in thrust when the rocket operates in a vacuum, and it is interesting to note that at the top of its powered trajectory—22 miles up—the motor of V.2 was developing over 600,000 horse-power.

At this point it may be as well to emphasise a second important difference between the rocket and any other form of propulsion. Aeroplanes, motor-cars and ships have to keep their engines running for the whole duration of their journeys. Not so the rocket. It builds up the greatest possible speed in a few seconds, and that speed must be sufficient for it to "coast" until its destination is reached. The motors may only be in operation for a fraction of the total time of flight; while the rocket is in a vacuum it will lose none of its speed through air resistance and only gravity can effect its path.

"What Goes Up Must Come Down."

There is a well-known saying that "what goes up must come down." This, like most proverbs, is only partly true. Indeed, the astronomer, looking at the moon and planets turning endlessly in their orbits, might be tempted to say: "What goes up never comes down!"

The law is true enough for most ordinary purposes. Even V.2 which attained a speed of a mile a second, could only rise a hundred miles before falling back to earth. But the earth's gravitational field weakens with increasing distance, with the results shown in the following table:

Velocity							
—mps	1	2	3	4	5	6	7
Height							
—miles	85	360	920	2,000	4,500	12,000	infinity

The upper row gives the terminal velocity of the rocket, and the lower gives the distance it would rise as a free body once it had reached this speed. When fired vertically, V.2 takes about 25 miles to reach its maximum velocity, so its present ceiling is about 110 miles (25 + 85).

Away from Gravity.

The important thing to notice is the spectacular way in which altitude increases with rising speeds, an infinite altitude being reached at a speed of seven miles a second. This is the reason why seven miles a second is called the "velocity of escape." A body which attained it would travel out into space, and though the earth's gravitational field would always be slowing it down, it could never draw it back again.

However, there is a lower speed at which a rocket, even if it could not escape completely, at least need never return to the earth. A machine flying horizontally must clearly experience a centrifugal force urging it away from the earth's centre. This force is negligible at ordinary speeds, but we can imagine a speed at which it would just balance gravity. Calculation shows that near the earth's surface the required velocity is five miles a second. This is called "orbital velocity" and obviously decreases with increasing distance from the earth.

Although this may at first sight seem a curious idea, a little consideration shows that this is just the way the moon has managed—quite successfully so far—to keep from falling down! Being so far away it need only move at less than a mile a second to produce the required centrifugal force, but a satellite just outside the atmosphere would have to travel at the full five miles a second.

It will therefore be much easier for a rocket to get into an orbit around the earth than to escape completely, and for many purposes, as we shall see later, this will be of much greater practical value.

Vital Factors.

The speeds we have been discussing are very high—five to seven times that of V.2. However, V.2 is only the first of all large rockets ever to be built, and is no more representative of what will come later than the Wright biplane is comparable to the B.36. Even to-day, with existing fuels and techniques, it is possible to design machines capable of speeds of up to three miles a second, or ten thousand miles an hour.

The velocity which a rocket can attain depends on two factors—the jet or exhaust velocity, and the ratio of fuel carried to all-up weight. In the case of V.2, seventy per cent of its weight was fuel and obviously it will be very difficult to increase this figure substantially. It may be just possible to build rockets carrying a ninety per cent fuel load, but engineering as well as economic considerations must set a limit to this process.

The most powerful fuels so far employed have jet velocities of about 5,000 mph. In theory much higher speeds can be attained, with very great increases in resultant performance. A motor burning hydrogen and oxygen with perfect efficiency would have an exhaust speed of 12,000 mph, but the inevitable losses—and above all the difficulty of getting materials to withstand the temperatures involved—mean that nothing like this figure can be attained in practice. We shall probably be lucky if we get our rocket motors into the 7-8,000 mph region.

Overcoming the Snag.

In terms of performance, this means that we can hope to build rockets which can reach speeds of around three miles a second, which is very high, but not high enough to escape from the earth or even to get into an orbit around it. A

(Concluded overleaf)

INTO SPACE

(Continued from page 19)

first sight this would appear to be a fundamental limitation, but it can be overcome by the engineering dodge known as the "step" or "multi-stage" rocket.

If we can build a rocket A to give a speed of say 12,000 mph, to a reasonable payload, then in theory we can build another, much bigger rocket B, whose payload will be the rocket A. This A's final payload could reach 24,000 mph, and this is the principle of the two-step rocket which Perring discussed in his lecture (the German A.9-A.10 transatlantic project). Clearly A's payload might be an even smaller and faster rocket, and there is no theoretical limit to the number of stages. In practice, of course, one quickly reaches a state of affairs where the biggest rocket would be the size of the "Queen Elizabeth" while the final step would not look out of place in a bottle on November 5th. However, without going to such extremes it is possible to design a three-step rocket of reasonable size to escape from earth and enter space with a small payload.

Travel Fuel Combinations

A survey of the problem was recently made in a lecture to the British Interplanetary Society by Dr. Frank Malina, Director of Jet Propulsion Laboratory of the California Institute of Technology, which was responsible for American rocket weapons during the War. Dr. Malina considered the cases for two separate fuel combinations—(a) nitric acid and aniline, used in a very successful meteo-

For many purposes rockets circling just outside the atmosphere would be extremely valuable. They could carry much greater payloads, including instruments which could send automatic recordings back to earth for many months before their batteries failed. Simple thermo-couple generators operated by the intense solar heat might prolong their lives indefinitely.

2,000 Tons at Take-off.

These projects are possibilities of the next decade, but getting men into space is a very much more difficult proposition. There is no reason why man-carrying rockets should not be built in the relatively near future, but since their minimum payload would have to be several hundred pounds it will be a long time before such machines reach heights of say, a thousand miles, or speeds of more than three miles a second. However, even with existing fuels "space-ships" could be constructed to take men round the moon or even to land upon it, but they would be enormously expensive and would weigh something like 2,000 tons at take-off. Whether such machines will ever be built is a matter of conjecture, but the release of atomic energy makes it seem unlikely.

Atomic reactions are a million-fold as powerful as the chemical ones we have been considering hitherto. If—and it is rather a large if—nuclear energy can be harnessed to rocket propulsion, the results we have quoted will look as silly as the performance figures of a clockwork-driven airliner. In theory, a few pounds of plutonium could take a good

“Even if it still lies a century ahead, we are now moving towards one of the greatest turning points in human history.”

ogical rocket which has reached heights of over forty miles and (b) oxygen and hydrogen. He decided that a five-step rocket would be the most efficient design, and with a ten pound payload, the initial weights of the two rockets would be 376 tons for case (a), but only 4 tons for case (b). These figures show very clearly the importance of high fuel energy. With the refinements of design the next ten years will bring, we may hope that a rocket weighing about a hundred tons would get a payload of perhaps fifty pounds to the moon, while considerably larger payloads could be made to circle the earth indefinitely...

Colonising the Moon?

Apart from its obvious and unfortunately military applications for long-range missiles, what use will research of this sort be? The answer is rather complex, and is linked with progress in many branches of science—particularly radiophysics, meteorology and astronomy. Once we can get recording instruments out into space, whole new fields of knowledge will become available. Already a great deal about the upper atmosphere has been learned by modified V.2's fired from the New Mexico desert.

Perhaps one of the most fascinating possibilities of all lies a little further ahead. It has been suggested that a rocket fitted with television equipment be fired towards the moon, so that for the first time man can obtain real close-ups of the lunar surface. More than this, it would even be possible to steer the rocket by remote control so that it circled the moon and gave us glimpses of the far side, which our telescopes can never see.

many tons not merely to the moon but to the remotest planets.

There seems general agreement that interplanetary voyages must wait until atomic propulsion has been achieved, and how long that will be no-one can tell to-day. But at the present rate of technical progress, the writer will be very surprised if the crossing of space by man-carrying machines is more than thirty years ahead. Think what has happened in aviation since 1916—and flying has practically marked time as compared with nuclear physics.

Will We See Interplanetary Travel?

Interplanetary travel will not come to-morrow, but it will be here the day after. Before we enter space there will be a period of intensely interesting development when our automatic rockets will be "blazing the trail." The technical difficulties to be overcome are immense, but they are no greater than those that have already been surmounted in other fields.

Even if it still lies a century ahead, we are now moving towards one of the greatest turning points in human history. Ages ago our ancestors, from unknown and forgotten lands, set out to explore and then to conquer the world. Soon our race, after its million years of confinement to a single planet, must meet again the challenge it accepted in pre-historic times. For one thing is certain, that civilisation can never be static. It must expand—physically or mentally—or it must perish.

We know now how that expansion can take place. With any luck, we may see it beginning in our lifetimes.

In focus: RAF St Mawgan Branch



A grant to buy RAF veteran Jan Anson a specialist beach wheelchair and surfboard recently got the Association's RAF St Mawgan Branch coverage in the local paper.

As a member of the Newquay Veterans Breakfast Club, Jay would regularly attend its affiliated surf club but could only watch from the promenade as his friends enjoyed the water. "We already had close links with the breakfast club," said branch chairman Steve Richards, "and it was through that link that the idea of helping Jay to overcome his exclusion was explored". The committee worked with the RAF Association's Area Welfare Officer and bought the chair and surfboard so Jay could take part fully.



Top: Jay (front) with his new surfboard and beach-accessible wheelchair. ©Chris Cox Photography

Below: Bargain Hunt's Thomas Plant lends a hand. ©Linda Fryett

St Mawgan Branch formed in early 2013 and has been an active presence in the local area and on-station at RAF St Mawgan ever since. As well as its proactive welfare work, the branch organised 18 Wings Appeal collections in 2019 – through supermarkets and street collections and with stalls at the Royal Cornwall Show, RAF St Mawgan 'Fest', and four motorway service stations.

The branch also takes advantage of opportunities. "Over summer we had a stall at a large antiques fair," said Steve, "and our Wings Appeal coordinator happened to spot the Bargain Hunt team. He quickly asked the programme's expert Thomas Plant to join us for a photo – which he did!" The branch has also hired the Newquay Cinema and raised more than £2,500 by screening the Battle of Britain film.

As St Mawgan Branch was set up 'behind the wire' on an RAF station, the two are well integrated. "The branch meets monthly on-station, and has serving personnel as active members and on the committee" said Steve. "Branch members are considered part of the station's family, and are regularly invited to events. Last summer the station organised a showing of Saving Private Ryan in their cinema to allow station personnel and branch members to get together. We also used this event to raise funds for the Association."

Raising awareness is seen as a key part of gaining new members and widening the Association's reach. "We have close links with our local newspaper's resident photographer," said Steve. "We use the station magazine Vigila, and social media is also very important in increasing our presence. Our website is full of information, and we make sure to keep it updated."

“ Our gatherings are fun, interesting and meaningful, otherwise why would members turn up? ”

Socially, the branch is also very active. There is a monthly speaker or quiz night, and twice a year members challenge the local RBL branch to a tenpin bowling match. Plans are being made for a sailing day with Turn to Starboard, and visits to the Plymouth Citadel and the Davidstow Moor RAF memorial museum.

"We'll also be concentrating on refining our Wings Appeal collection locations in 2020," said Steve. "We need to make sure that we collect at locations where we can get the highest yield. We've seen that if we regularly collect at locations for relatively low amounts each time, our member involvement tails off through 'collection fatigue'. This has meant ditching some locations and continually trying new ones to make sure that our valuable collectors' time is used most effectively."

In 2020 the branch hopes to beat its 2019 Wings Appeal total and increase the local networks through which they identify welfare needs. "We also want to grow our membership in 2020," said Steve. "Our branch mantra is to ensure our gatherings are fun, interesting and meaningful, otherwise why would members turn up?"

BRANCH NEWS

including region, area and overseas news

Anglesey Branch 1

The Avro Heritage Museum at the former Woodford Aerodrome was the site for a branch visit in October. Members enjoyed a short talk about the concept and aims of the museum, then were given a tour of the Vulcan, Lancaster and Nimrod forward fuselages. This was followed by lunch and a walk along the Avro timeline. They would certainly recommend a visit by other branches in the area.



Aphrodite Branch 2

Branch members enjoyed a visit to 84 Squadron at RAF Akrotiri in October 2019, where they were made very welcome by the Officer Commanding and station personnel. Very interesting and informative talks were given on the squadron's role in Cyprus, which was followed by lunch in the Sergeants' Mess with members of the air crew.



Barnsley Branch 3

A wooden RAF centenary bench and ceremonial flagpole were dedicated by the branch in a service in the grounds of Penistone Grammar School. The 15ft bench was carved from fallen trees using only a chainsaw. Funding was obtained from Tesco's Bags of Help scheme by branch member Joe Pinguey.



Barnstaple and North Devon Branch 4

The branch recently hosted the Association's concert band along with the Chivenor Military Wives Choir, who performed a variety of music commemorating the 75th Anniversary of D-Day. The concert band played The Longest Day, The Dam Busters March and an arrangement of Glen Miller tunes, while the choir rendered a selection of modern and nostalgic songs including a Dame Vera Lynn selection. The event was supported by members of the RAF Air Cadets and all proceeds went to the Association. Branch members also attended a memorial service for the crew of a Wellington bomber that crashed at St Giles in the Wood in December 1944.



Barry Branch 5

Branch members recently travelled to Steenbergen in Holland to commemorate the liberation of the Netherlands and the 75th anniversary of the deaths of Wing Commander Guy Gibson and Squadron Leader James Warwick. A ceremony was held at the Dambusters Memorial Park followed by a service in the evening at the graves of Gibson and Warwick. A plaque was also unveiled honouring the airmen of several nationalities who lost their lives during the war over Steenbergen and Dinteloovd. A visit was then made to the new museum of aviation history 'Wings over Woensdrecht'.



Bognor Regis Branch 6

"The oldest boyband in Bognor" (the branch's own skiffle band), its kulele players and its choir augmented the line up of the annual Southdowns Folk Festival, which the branch was honoured to host. For Bognor's remembrance service, branch chairman and standard bearer Cliff Mewett was joined on parade by his granddaughter Maisie – standard bearer for the 2nd Bersted Rainbows. Member John Batney also recently raised funds for the Association by taking part in a wing walk.



Bridport and Lyme Regis Registered Members Group (RMG) 7

Residents and visitors came together to remember those who fought in the Battle of Britain and find out more about the Association at the RMG's Brew for the Few event. Members sold RAF memorabilia and books, while quizzes for adults and children were laid on. The RMG was also supported by members of the Royal Naval Association. Uplyme Morris dancers provided the entertainment, with performances bringing in the crowds. The RMG's Alan Kidson said: "Our visitors were extremely generous, and we were more than satisfied with the amount collected."



Caduceus Branch 8

The branch wishes to thank Princess Mary's Royal Air Force Nursing Service for their support of over £700. Local RAF Air Cadets also raised nearly £2,000 from various events, and branch members joined them at their bi-annual inspection. The branch enjoyed their largest turnout ever for the Remembrance Parade, with 22 members present. Pictured is the branch's contingent for the London Cenotaph Parade in November.



Cranwell Branch 9

The year ended with several Wings Appeal events, some severely affected by adverse weather – notably the first attendance at the large Heckington Village Show. Monthly branch meetings took place, and members also joined with Waddington Branch at their inter-Association quiz (pictured) and dinner. Stalls were erected at the open day of the branch's adopted 2160 (Sleaford) Squadron RAFAC, who gave excellent support on Wings Day. Attendance at a local golf competition was even more successful, with the branch providing refreshments for the 96 competitors. Despite the setbacks, income from the Wings Appeal currently stands at £7K.



Ellesmere Branch 10

In September the Ellesmere branch arranged a Battle of Britain Service at RAF Shawbury's chapel. The service was conducted by the Reverend Wing Commander Alastair Bissell, and attended by RAF personnel, members of the branch and cadet squadrons from Oswestry, Shawbury, and Whitchurch who also took part in readings and prayers. The event was organised by RAFALO, Warrant Officer Anita Coyles.



Fareham Branch 11

Fareham Branch was joined by members of 1350 (Fareham) Squadron RAFAC and personnel from RAF(U) Swanwick for a street collection at the Bygone Fareham event in aid of the Wings Appeal. In November the branch also enjoyed an evening of toy horse racing with members of The Duke of Connaught's Own Club – the home of Fareham Branch – with a percentage of the taking donated to the Wings Appeal. At the branch's monthly social gathering, guest speaker Kevin O'Neill from the Association's South-East and Eastern Area offered a thorough insight into the work of the Association in his own inimitable style.

Faversham Branch and Whitstable and Tankerton Branch ¹²

Faversham Branch joined forces with Whitstable and Tankerton Branch to hold an annual service in memory of Pilot Officer Roy Achille Marchand. Marchand, whose family were also in attendance, flew with 73 Squadron and was killed on 15 September 1940. The branch also held a dinner at The Brents Tavern in Faversham along with members from four other local branches.



Global Branch ¹³

The branch continued their year's activities with a visit to the USAF 48th Fighter Wing at RAF Lakenheath. A base visit included a tour of the control tower and getting up close and personal with one of the base's F-15 heritage aircraft. A 'greatly informative day' was had by all, with the branch continuing to cement Anglo/American relationships.



Great Yarmouth and District Branch ¹⁴

A large congregation came together in September to remember the heroism of the air and ground crew of the RAF and allied air forces in 1940. The remembrance service was led by the Reverend Simon Ward in the presence of the High Sheriff Lady Agnew and The Mayor of Great Yarmouth Councillor Michael Jeal and his Consort. The address was given by the Reverend Frank Cliff. Flight Lieutenant Tracy Cameron, officer in charge of 221 (Great Yarmouth) Squadron RAFAC read the poem 'High Flight' written by John Magee, a pilot in the battle who died in 1941.



Hartlepool Branch ¹⁵

At RAF Boulmer, Corporal Conway gave branch members a short presentation on the role and operation of the station. The station's 'bunker' was then explored to see the system in action. Flying Officer Daymond explained how information from radar units across Britain contributes to the screen plots, before Flying Officer Monteeth explained how the data is used to protect UK airspace. Pictured are: Flight Sergeant Hughes (in greens) flanked by Dave Stacey and Cliff Stubbs. In front (l-r) are Paul Rodway, Pauline Cantrell-Stephenson, Joan Gleeson and Bryan Tanner.



Headcorn Branch ¹⁶

The 49th annual service to honour the memory of RAF pilots lost in the Battle of Britain - and in particular of Robert Shaw - was held at the branch's memorial garden. Shaw lost his life on the site on 3 September 1940, and was described as 'the unknown Battle of Britain pilot' until his identity was officially confirmed in the early 1980s. The wreath-laying was accompanied by a flypast from the Battle of Britain Memorial Flight, with its Officer Commanding flying a Hurricane.



Huyton with Roby and Liverpool Branch ¹⁷

The Lord Mayor of Liverpool invited branch members to Liverpool Town Hall in September to officially launch their Wings Appeal. The photograph shows (front row, l-r): Mr Alan Dickin, club chairman; The Lord Mayor, Cllr Anna Rothery; Phil Southern, Wings Appeal Officer. (Back Row, l-r): Flight Lieutenant John Kelly, 7F (1st City of Liverpool) Squadron RAFAC; Deryk Stanton, committee member; and Tony Hylton, branch secretary.



Kettering Branch ¹⁸

The branch hosted the RAF Wyton Area Volunteer Band and Wyton and Brampton Wives Choir Concert at St Andrew's Church and Arts Centre. The varied programme ranged from 'The Lion King' to 'Those Magnificent Men in their Flying Machines' to 'Eagle Squadron', and 'I Vow To Thee My Country', closing with 'The Day Thou Gavest Lord is Over (Sunset)' and the 'Royal Air Force March'. The night raised money for the Wings Appeal and branch funds through ticket sales, teas and coffees, a draw and a teddy bear sale.



Leamington Spa, Warwick and District Branch ¹⁹

The branch's annual Battle of Britain service was held in September and was well attended. It was supported by two of the branch's adopted RAF Air Cadets squadrons. The Battle of Britain Memorial Flight provided a Hurricane flypast to mark the event, with the photograph showing attendees looking on before entering the parish church for the commemorative service. The branch standard was paraded together with those from 1368 (Warwick and Royal Leamington Spa) and 2028 (Southam) Squadrons RAFAC.



Mansfield and District Branch

The branch held its annual Battle of Britain dinner at The Hostess Restaurant in Mansfield. Several cadets from 1300 (Sutton-in-Ashfield) Squadron RAFAC who helped with the Wings Appeal collection also attended. The branch also collected in Four Seasons Shopping Centre, with the help of 384 (Mansfield) Squadron RAFAC. In 2019 the branch raised over £3,800 in total for the Wings Appeal. Members also attended the Battle of Britain service in Westminster Abbey in September.



Medway Towns Branch ²⁰

RAF Air Cadets from across Medway gathered in September to commemorate the anniversary of the Battle of Britain. Over 100 RAF Air Cadets and adult volunteers from 25 (Parkwood), 213 (City of Rochester), 402 (Gravesend), 1039 (Gillingham), 1404 (Chatham) and 2374 (Ditton) Squadrons paraded in Brompton before a service of remembrance at Saint Barbara's Garrison Church, organised by the branch. Branch chairman Paul Collins then read out a roll of honour before a minute's silence was observed. Following the service, a reception was held at 1039 (Gillingham) Squadron's headquarters.



Melbourne Branch ²¹

Members met at the Stella Maris Seafarers Centre in Melbourne in September to share a drink to commemorate the Battle of Britain. Photographed (l-r) is: Bill Johnson, RAAF motor transport fitter; Frank Scott, air crew with Bomber Command, chief engineer in charge of the maintenance crew and branch secretary; Barry Suckley, RAF chef and 1200 South Australia Branch chairman (in an Isle of Man tartan kilt for the occasion); and Ron Dickens, RAAF Accounting Branch.

Mid-Somerset Branch ²²

The branch's Battle of Britain service was held in September at St Peter and St Paul's Church, Shepton Mallet. A strong contingent of cadets from 914 (Glastonbury/Street), 1182 (Shepton Mallet) and 1955 (City of Wells) Squadrons RAFAC attended, parading their banners and the branch standard. The service included personal reflections given by the branch's honorary welfare officer Squadron Leader Carolyn Giddings, and branch life vice-president Flying Officer Paul Branson. Wreaths were laid at the town cenotaph by the Lord-Lieutenant, the branch president and the local Royal British Legion president, with the Association flag flying over the ceremony.

Motorcycle Branch 23

After a few inactive years, the branch has once again formed a committee and begun organising events. Existing membership is 129, of whom 89 are currently serving. The branch's next step is to hold its first AGM – likely in March 2020. The committee are planning increased social media activity to keep members informed, a regular newsletter and a new branch website. Chairman Mike Hoddinott (pictured) said "I've been a member of the Association for 10 years and riding a motorbike since I was a child... I was honoured to be invited and voted in as chairman of the Motorcycle Branch, and intend to serve you well."



North Cotswolds Branch 24

The branch had a successful day at the Ilmington Annual Fete with their gazebo and book stall. The weather was superb and crowds were good, and the branch raised £140 in just over two hours thanks to efforts of our Wings Appeal Organiser Keith Moule.



North Walsham Branch 25

In September branch members visited the radar station at RRRH Trimmingham on the North Norfolk coast. Members were treated to a guided tour of the facility by two Senior Aircraftmen (Technician) Max Olive and Jim Taylor, which included a brief history of the Trimmingham site and the daily workings of the TPS-77 radar. The members enjoyed this rare opportunity to view a working radar site at first hand.



Peterhead Branch 26

In August, branch member Andy Artess, his wife Zoe and daughter Eloise were out in Mintlaw at the MACBI Community Hub road safety day collecting for the Wings Appeal. As well as the usual badges and ducks, they had a 'name-me-claim-me' bear with the winner to be drawn at the branch's Battle of Britain dinner. The dinner was held in September and was attended by 41 members, family and friends. The raffle raised £190, the bear another £71, and – along with the collection taken after the service on the Sunday – the total raised was £330.



Rotherham Branch 27

The branch held a dedication ceremony for their new RAF100 memorial bench, installed in the memorial gardens in Clifton Park close to the cenotaph. The service was attended by branch members, Councillor Ian Jones Armed Forces Champion on Rotherham Council, and sponsors who contributed to the bench's cost. The branch also hosted a concert featuring the Chilwell Military Wives Choir and Maltby Miners Welfare Band. During the ceremony, tributes were also paid to branch members who had recently passed away: Jean Philip; Kim Johnson; and John Watkins. The ceremony concluded with the laying of a wreath on the cenotaph by chairman Malcolm Blease.



Rutland Branch 28

Branch members attended the presentation by chairman Duncan Manderson of a watch, certificate and cheque to Francis Humphreys upon his retirement after 25 years' service as branch standard bearer. In this time, Mr Humphreys has travelled the UK and abroad to represent the Association at events such as the Menin Gate ceremony, the Military Tattoo in Birmingham and the RAF100 anniversary in St Clement Danes. He has paraded the Standard at numerous funerals, remembrance parades and closures of RAF stations. All branch members recognise with pride the conscientiousness and dedication Mr Humphreys has shown throughout his tenure as standard bearer.

Ryedale Branch 29

The branch boosted their Wings Appeal donations at the North Yorkshire Moors Railway in Wartime Weekend, where members demonstrated a Battle of Britain plotting operation, took part in a Drumhead Service and staffed a fundraising stall at Grosmont Station in period uniforms.

South Fylde Branch

Following the closure of Richard Peck House the branch has relocated across the road, and now meets at: The Parish Rooms, St Thomas's Church, St Thomas Road, Lytham St Annes, FY8 1JL. Meetings are still held on the first Wednesday of the Month at 7:30pm for 8pm. Tea and coffee provided.



Stockton and Thornaby Branch 30

Thanks to the generosity of the Teesside public and the managers of local Asda, Morrisons and Castlegate Centre shops, the branch raised nearly £4,500 towards 2019's Wings Appeal. Next year sees the 80th anniversary of the Battle of Britain, and discussions are underway with Thornaby Town Council to commemorate the event with a plaque in Thornaby Town Centre – built on the former site of Thornaby Aerodrome. The branch also attended the town's cenotaph on Battle of Britain Sunday, where vice chairman Jack Chapman (pictured) laid a wreath in memory of 'The Few'.

Sud-Ouest France Branch 31

The branch held their Battle of Britain commemoration in October at Cadillac on the outskirts of Bordeaux, which was attended by 26 members and raised £175 for the Wings Appeal. A short talk was also given by Chris Goss – aviation historian and the branch's vice-chair – about the 13 Frenchmen who flew in the Battle of Britain. It evoked much discussion among the members, with one subsequently writing a letter to Chris thanking him for recalling the sacrifice of these French pilots with such style and delicacy: "all the French thank you for it!"



32



33



34

Thetford and District Branch 32

The branch attended the sixteenth East Wretham memorial service in November to commemorate the Czechoslovakian and Polish airmen interred in the Commonwealth War Graves Plot at St-Cuthbert's Church, Wretham. In attendance were branch members, the Royal British Legion, the defence attachés from the Czech, Slovak Republic and the Republic of Poland embassies, along with the town mayors of Thetford & Watton plus military personnel from RAF Honington.

WRAF Branch 33

Marching for the sixth year since its formation, 54 members from the UK and Spain represented the branch at the Cenotaph in November 2019. Many members also joined services in their local communities, including Nicola Willis Jones who attended the British and Commonwealth Service in Washington DC.

York Branch 34

Branch members attended this year's Allied Air Forces Memorial Day at the Yorkshire Air Museum in September. The event commemorated the outbreak of WWII, and the 75th anniversaries of both D-Day and the Arnhem operations as well as honouring the sacrifices of airmen and women in more recent conflicts. The annual Battle of Britain commemoration service also took place in September and was attended by Mr Ian Smith, the branch's Wings Appeal Officer. In November, branch members took part in the annual Remembrance Day parade in York. As of the end of October the branch's Wings Appeal had raised £16,800.

Submissions to Branch News

We welcome all submissions for Branch News, preferably by email to BranchNews@rafa.org.uk. Your word count should be no more than 100 words.

Please submit just one accompanying photograph, as a separate jpeg, tiff or gif file and at a size and quality of at least 300dpi. Photos of insufficient quality may not be published. Submissions can also be accepted by Royal Mail to the address on the inside front cover. Unfortunately photographs submitted by post cannot be returned.

Due to space limitations, submission does not guarantee inclusion and where there are too many reports for an issue, the editor reserves the right to select the broadest range of news and photos to reflect the geography, people and different activities of the Association. Only submissions made by email will be acknowledged before publication.

The deadline for inclusion in the next Branch News is 14 February 2020.

Culture Vultures



Books

"Dancing the Skies"

by David Roome
Publisher: The Book Guild Publishing

Dancing the Skies charts the flying career of Association member Group Captain David Roome. David joined the RAF aged 18 and had a 46-year flying career which encompassed numerous adventures, including ejecting from 500ft; receiving a bullet hole in his wing from an irate East German soldier; and organising the flypast over London to commemorate the 50th Anniversary of the Battle of Britain. He began displaying historic jets before leaving the service in 2001. He then ran a company maintaining and displaying these aircraft before he flew the BAe Hawk in support of Royal Navy ships training in the Channel. He retired from flying on his 65th birthday having completed almost 8,000 flying hours.

Association members can get 15% off this book by visiting bit.ly/DRoome and using the code **DTS15**



"From the Cold War to the War on Terror"

by Michael Haygarth
Publisher: Pen & Sword

Michael Haygarth joined the RAF as a young weapons technician. Over a thirty-eight-year career he found himself being woken by sirens at the height of the Cold War; fast-roping out of helicopters with US Army Rangers; being driven around Basra in a taxi with a pistol stuck in his waistband, and convoying around Baghdad looking for unexploded bombs. He also served in Kosovo as part of a multinational force tasked with clearing thousands of bombs, as well as working with the International Crimes Tribunal to clear numerous mass graves; all of which were way beyond the usual experiences of an RAF engineer.

Association members can get 25% off this book by visiting bit.ly/MHaygarth and using the code **CWWT25**



Audiobooks

"The Silver Spitfire"

by Wing Commander Tom Neil
Narrated by Roger Davis
Publisher: Orion Publishing

Following the D-Day landings, Battle of Britain pilot Tom Neil was assigned as RAF liaison to an American fighter squadron. As the Allies pushed east, Neil commandeered an abandoned Spitfire as his own personal aeroplane. Erasing any evidence of its provenance and stripping it down to bare metal, it became the RAF's only silver Spitfire.

Alongside his US comrades, he took the silver Spitfire into battle until, with the war's end, he was forced to make a difficult decision. Faced with too many questions about the mysterious rogue fighter, he contemplated increasingly desperate measures to offload it, including bailing out mid-Channel. He eventually left the Spitfire at Worthy Down, never to be seen again.

Musical Memories

A recent survey by BFBS was undertaken to find those songs that bring back military memories, and the stories behind them. The top ten results are:

- 1 Brothers in Arms – Dire Straits
- 2 Bat out of Hell – Meat Loaf
- 3 Sailing (1975) – Rod Stewart
- 4 Hotel California – Eagles
- 5 Nights in White Satin – The Moody Blues

- 6 Boys are Back in Town – Thin Lizzy
- 7 Don't Stop Me Now – Queen
- 8 = Come on Eileen – Dexys Midnight Runners
- 8 = Leaving on a Jet Plane – John Denver
- 9 Sailing – HMS Ark Royal

Do you have a particular song which you associate with your time in the RAF? You can tell us what it is and why it's so important to you by emailing airmail@rafa.org.uk or writing to the address on the inside cover.



Brilliant Work

The “truly awesome work” of the RAF’s Trade Group 14 and other photographers was celebrated at the 50th RAF Annual Photographic Competition last October.

Air Marshal Gerry Mayhew, Deputy Commander Operations, congratulated the winners as he handed out the awards at the Bentley Priory ceremony. The successful photographs were the best of 1,000 images entered by RAF personnel and 500 submitted by amateur photographers.

Air Marshal Mayhew said: “This is above professionalism and dedication in media and comms – it is as much about flight safety and other RAF professions’ safety now. It is brilliant work.”

Having sponsored both the event and the People’s Choice category, the Association sent Air Mail to the ceremony to meet members who had been recognised, talk to them about photography, and ask them about their favourite images in the competition.



Now You Have My Attention

Nine Tornados line up to take part in a farewell flypast over Marham and Cranwell in February 2019. This photo was one of the six which comprised ACSSU, RAF Halton’s runner-up entry in the Photographic Section Portfolio.



There’s No Place Like Home

Lexi and her father Flight Lieutenant Simon Tofrik on the day the Tornados retired from RAF service.



Corporal ‘Matty’ Matthews is currently based within the Photographic Air Combat Service Support Unit (ACSSU) at RAF Halton. Along with photography, Matty enjoys spending time with his wife and three children, and is an American Football fan and general ‘aviation geek’.

Corporal Matty Matthews, RAF Halton

Corporal Matty Matthews won first place in the Personnel section for ‘There’s no place like home’ as well as two other second places and two highly commended.

“The favourite photo I took this year was ‘Now you have my attention’. It was the [Tornado’s] final Diamond Nine formation flight. When they landed I sorted it out so they did an ‘elephant walk’ on the runway at RAF Marham. It was the hardest shot to get of all my photographs. I had to get a lot of permissions, and even up until 10 minutes before it was going to happen it could have been called off. Plus if Tornados taxi for too long their wheels can overheat, so to get them all on the runway for that shot took a lot of planning, but it paid off.”

Corporal Matthews’ favourite image by a colleague is ‘Stargazer’, the People’s Choice winner: “I know Tim well and it’s a lovely shot. Definitely one of my favourites.”

See all the 2019 images and videos by winners, runners up and highly commended at: raf.mod.uk/photo-of-the-year/2019.

All images ©MOD/Crown unless otherwise stated.



Corporal Graham Taylor, RAF Halton

“We were at RIAT and there was a young lad whose dad had tweeted the RAF to say that his son always saluted pilots at air shows, and asking pilots to salute his five year old son (Jacob Newson) if they saw him,” said Corporal Taylor. “The RAF arranged for him to meet the Red Arrows pilots in the few minutes between their briefing and taking off. The Red Arrows’ photographers were busy elsewhere, so I made a 20 minute dash from the other side of the air show to get there in time. I quickly lined the pilots up and took the shot, so it wasn’t set up beforehand.”

Corporal Taylor’s favourite photo by another photographer is ‘Plugging the gap’ by Corporal Tony Hawke. “It’s a really atmospheric shot that places you in that moment.”

Speaking of his links with the RAF Association he said: “I’ve been a member since I joined the RAF in 2000. The stations often do a lot of work fundraising for the Association, and as a photographer I like to cover whatever they do”

Salutations

Third in the Personnel category. Jacob Newson (5) takes a salute from his heroes, the Red Arrows pilots, at the 2019 Royal International Air Tattoo.



Plugging the Gap

Chinook from 27 Squadron based at RAF Odiham helps with flood relief at Wainfleet, Lincolnshire, by Corporal Tony Hawke.

Corporal Graham Taylor has been a member of the Association since joining the RAF in 2000. When RAF Halton puts on Association fundraisers, Graham can often be found covering events from behind the lens.



Corporal Will Drummee, Photo Air Combat Service Support Unit (ACSSU), RAF Halton

'Dusk delivery' by Corporal Drummee was highly commended in the Operations and Exercises Category. "It started as a fairly routine job," he explains. "A C17 came into Musannah air base in Oman and I was taking the standard shots when I saw it was unloading a Chinook helicopter, which made a difference from the usual cargo and boxes. The sunset in the background was also the best of the entire six weeks I was there, so it all came together; the silhouette of the C17, the Chinook and the sunset. It all just worked."

'Stargazer' was his favourite image by a colleague: "I'm glad the People's Choice went the way it did – it's the one I voted for! I know Tim went out of his way to get that shot at a time most people would be in bed. It was nice to see something different which hasn't been done before."

Dusk delivery

An RAF Chinook helicopter from No. 27 Sqn RAF Odiham waits inside an RAF C-17 transport aircraft as crew and movers begin the process of unloading it.



Fencer

Members of the fencing club at RAF Cosford take part in a practice session in the station gymnasium.

Senior Aircraftman Ciaran McFalls, RAF Coningsby

Senior Aircraftman McFalls joined the RAF as soon as the opportunity arose in 2017, and is on his first posting at RAF Coningsby. He works with the Typhoons, the Typhoon display team and the Battle of Britain Memorial Flight.

His photo, 'Fencer', won second prize in the Sports Photograph category. "It was a brief from the media operations course," he explains. "The move is a 'fleche', a diving attack, which I lit to get rid of the equipment round the edge of the hall, and to show the roundel on the floor."

On the day of the awards it had been announced that one of the Typhoon pilots had been selected to be part of the Virgin Orbit small satellite team. Ciaran said: "Space will provide fresh challenges for the photographers; with the lack of light and the changes in the equipment we'll use and the training we'll need. How will zero gravity affect the photographs and the photographers?"

Talking about his links with the Association he said: "I was encouraged to join. My father [Iain McFalls] is on the Northern Area Council and lots of my family are in service. I was also an air cadet and worked alongside Huddersfield Branch collecting for the Wings Appeal. It was hard work, but really fantastic work."



Stargazer

A CH-47 Chinook helicopter rests at night during a training mission in the Arizona desert.

Corporal Tim Laurence, Photo ACSSU, RAF Halton

Corporal Laurence won the People's Choice award (sponsored by the RAF Association) for the second year in a row. "I am a huge aviation nerd, a real geek. And sometimes I forget that this is a job," he said. "It's very blurred between work and pleasure. For me the awards ceremony is more about the people than the winning photographs," he added. "There's a friendly rivalry and naturally we bounce off each other and inspire each other to do different things."

Corporal Tim Laurence joined the RAF as a weapon technician in 2007. In 2013 he re-mustered to become a photographer and is currently based at RAF Halton's ACSSU Photo Operations unit.



"The best thing about the job is the opportunity we get to travel, the technical opportunities and the high profile media tasks. We are given the responsibility to portray the RAF in the best way possible and it's very satisfying to be able to show people in their best light."

Mr Simon Hall

Mr Hall, who won the Amateur category, works as a warehouseman for Waitrose & Partners. His passion outside work is photographing aircraft and motorcycles. Speaking at the awards ceremony, he said: "This is the first time in 15 years that I've won any kind of photographic competition. And it's the first time I've entered the RAF Photographic Competition; I'm off to chat to the judges to find out what they really liked about it. After my picture got posted on the RAF Photographers' Facebook page, the wife of the navigator got in touch. She said it was his final flight after 3,000 hours on the aircraft and a very emotional image for him."



Simon Hall's Amateur Category winner. ©pixhallimages.co.uk



Bam! Right in the kisser

Fighters from the RAF, Army, Navy and Berinsfield boxing club compete during an evening of boxing at RAF Odiham. The RAF team were overall victors, winning five out of the nine bouts.

Corporal Rob Travis, RAF Odiham

After winning first place in the Sports Photograph category, and collecting the Photographic Section Portfolio Prize for RAF Odiham (he took all the images submitted) Corporal Travis said: "The hardest photo to take was 'Balancing Act', where the Chinook has two wheels on the rocks. The wind was 120mph and it was very challenging to get down the ramp and off, but the light was perfect when I got into position. I don't like to stage my shots too much, so reacting to what's going on is me through and through; I love it.

"My favourite other photos on display are the air-to-air shots. I know how much of a skill it is to capture these. I also really like some of the students' photos. It's fantastic how creative they can be."



Corporal Rob Travis has served in the RAF for 15 years, and is also an Association befriender.



Balancing Act

Balancing act: A Chinook from 27 Squadron undertakes a rear wheel landing to deploy Royal Marines on a training exercise in Dartmoor.

"The portraits by Paul Saxby (below) are really good. They're just so different, and it's something that's not been done before. "I'm involved with the Association's befriending scheme but haven't been assigned a befriender yet, so I'm looking forward to that. I also help out with fundraisers on station. From WWII veterans to modern day personnel, they've given their time – and sometimes more than that – so we have to give back. There's a bigger picture to see; one day it could be me that needs help. Asked about 'photogs in space' he said: "I'd love to do it. As a kid I had a poster of the crescent of the moon with earth in the background; an image which showed everyone on earth except three. Today we photograph the day-to-day workings of the RAF, with people jumping in and out of aircraft. The future will be the same, just with spacecraft. There'll certainly be a need for photos of space – people will want to know."



Replace headdress and Badge of Honour

Photographs by Paul Saxby capturing Warrant Officer and Association member Balbir Flora for a Black Asian Minority Ethnic (BAME) recruitment campaign showing the various ethnic origins represented in the RAF.



Red Sparrows

Children dressed in Red Arrows jumpsuits at the RAF Cosford air show.

Leading Aircraftman Harry Roberts was a keen photographer prior to joining the RAF. He formerly ran a business specialising in automotive photography, allowing him trackside access to photograph a range of exotic cars.



Leading Aircraftman Harry Roberts, RAF Leeming

The winner of the 2019 Mallet Student Trophy, Leading Aircraftman Roberts, said: "It's early days for me. The Red Sparrows image was taken at Cosford Air Show; lots of people like that a lot. The picture of the veteran with the hand on his shoulder was taken at the 75th anniversary commemorations of D-Day at the National Memorial Arboretum. That's also where I got a picture of Prince William laying a wreath. I got to be on the Royal Rota that day." [the exclusive group of journalists and photographers responsible for reporting and sharing a royal engagement and distributing the news and images to the rest of the world's journalists].

"I did GCSE, A Level and a foundation course in photography. Then I freelanced for some automotive magazines - I like shiny metal. I always planned to join the RAF but had to wait for an opportunity. I completed my RAF training in 2017 then went straight on to a video course, so haven't made it to my station yet."

Veterans

A veteran at The National Memorial Arboretum (NMA) commemorates the 75th Anniversary of D-Day and the Battle of Normandy.



Perfectly timed

Senior Aircraftman Aran McGuckin, from 3FP wing at RAF Marham wakeboards before a backdrop of a Eurofighter Typhoon.

Senior Aircraftman Kitty Barratt, RAF Marham

"I was on a boat taking pictures of wakeboarders not far from RAF Coningsby, so there'd be Typhoons flying in the background. I just managed to get it really well timed," said Leading Aircraftman Barratt, after being highly commended in the Sports Photograph category for the appropriately named 'Perfectly Timed'.

"It's always hard to pick a favourite. It changes all the time depending on my mood. I like pictures of people. I like pictures of aircraft too of course, but it's people I love. I like Matty's photos of the pilots with their families ['There's no place like home']. They're very emotional."

Senior Aircraftman Kitty Barratt is building an impressive portfolio, having also been a finalist in the 2018 competition.





News from the RAF

by Mike Curtis

The Red Arrows fly over Niagara Falls, Canada during their 74-day, 22,000 mile tour of the United States. ©MOD/Crown 2019

RAF pilots undertaking basic fast-jet training have used the Shorts Tucano for the last time, with the aircraft now being retired from service and replaced by the Beechcraft Texan. The last graduation of pilots who were trained on the Tucano took place in October at RAF Linton-on-Ouse.

The final flight marking the retirement was witnessed by station staff and guests who were treated to the sight of a nine-ship sortie over the local area. As the last Tucano landed it received the traditional hosing down by the fire engines and a flypast by a Typhoon, Hawk and F-35B Lightning II.



F-35B Lightning II jets on board the carrier HMS Queen Elizabeth for the first time. ©MOD/Crown 2019

Reviewing the graduation was the Chief of the Air Staff, Air Chief Marshal Mike Wigston, who said: "The Tucano has given outstanding service, training our frontline pilots since 1989. The men and women who will fly modern combat aircraft like the Typhoon and Lightning need a trainer that best prepares them for that mission. We will miss the Tucano, but its place in RAF history is secure. We look to a bright future with its replacement aircraft, the Texan."

The retirement of the Tucano will also mean the closure of RAF Linton-on-Ouse, as the training on the Texan will be carried out at RAF Valley. The station will continue to host the Yorkshire Universities Air Squadron until the end of 2020 when they too will move to a new home and the station will close.

Exercise Bersama Lima brought the armed forces of Australia, Malaysia, New Zealand, Singapore and the United Kingdom together in

Malaysia to develop their joint training, interoperability and understanding. The Five Powers Defence Agreement is an important element of the UK's relationship with Malaysia and Singapore, and is a key regional defence arrangement.

During the 17-day exercise the RAF detachment found itself being tested by increasingly demanding air activities that culminated in a full-scale simulation mission in the skies above Singapore. One of the unique challenges of operating in South East Asia during monsoon season was the thunderstorms and torrential downpours that occurred most afternoons.

The Officer Commanding II(AC) Squadron, based at RAF Lossiemouth said: "It has been a genuine pleasure to work with the other Five Power nations throughout this exercise. We really welcome the ability to work together with other Commonwealth countries in the spirit of friendship and collective training. We have conducted air combat, offensive intercepts, maritime close air support and multi-aircraft combined missions together, culminating in a complex air attack requiring coordination and cooperation between all countries and personnel.

"We are very much looking forward to returning to Malaysia and Singapore in 2021 to celebrate 50 years of the Five Powers Defence Arrangement, a milestone well worth celebrating as it represents a remarkable period of peace and stability for all our nations."

In addition to the Typhoons, an RAF Voyager from Brize Norton was also deployed to Singapore for the first time to conduct air-to-air refuelling which allowed the Typhoons to significantly increase their endurance in the air.

On the other side of the world, RAF F-35B Lightning IIs were hovering, landing and taking off for the first time from Britain's next-generation aircraft carrier, HMS Queen Elizabeth. Flown by Royal Navy and RAF pilots, the aircraft embarked on the 65,000-tonne carrier during operational trials off the East Coast of the United States.

Wing Commander Adam Curd was the first pilot to land: "This is the first time I have landed onboard an aircraft carrier," he said, "For it to be HMS Queen Elizabeth, and in an aircraft as amazing as a Lightning, is quite something. This is a proud moment not only for me but the wider team that has brought us to this milestone."



USAF B-52 in formation with RAF Typhoon from 3 Squadron, RAF Coningsby. ©MOD/Crown 2019

In the UK, Typhoon crews from Coningsby have been working closely with the Luftwaffe and the United States Air Force. RAF Coningsby and Luftwaffengeschwader 73 Taktisches, based at Laage, Germany, have signed a formal 'twinning' agreement which allows the two forces to create regular opportunities to meet, train and exercise together at both Laage and Coningsby. RAF Coningsby Station Commander, Group Captain Mark Flewin said: "I'm delighted that we have now joined with our German colleagues in this mutually beneficial arrangement. The twinning agreement formalises the relationship we have had with our NATO ally for many years, but it will also create enhanced opportunities to strengthen cooperation and interoperability."

Typhoons based at Coningsby have again been exercising with visiting US B-52 bombers. For the second time in 2019, Typhoon pilots carried out a practice intercept over the North Sea, giving both the RAF and USAF aircrew the opportunity to exercise with each other – and get some memorable air-to-air photographs. The B-52s were on a temporary deployment to RAF Fairford in Gloucestershire.

The Red Arrows returned home to RAF Scampton in October after the team's tour of North America which took 74 days and covered more than 22,000 miles. During this historic deployment, the Red Arrows engaged with tens of millions of people through 21 displays, daily media activities and 30 stunning flypasts over major landmarks and locations. These included Niagara Falls, San Francisco's Golden Gate Bridge and New York's Hudson River, with Manhattan's skyscrapers forming an impressive backdrop.

The prototype of the Hawk, which is used by the Red Arrows, has made its final flight under somewhat unusual circumstances. It 'flew' from Boscombe Down airfield to the aviation collection at Old Sarum near Salisbury slung under an RAF Chinook from 27 Squadron at RAF Odiham. The move marked 45 years to the day that XX154 first flew on 21 August 1974. The aircraft had been used by the Empire Test Pilots School at Boscombe Down before being withdrawn from service in December 2018.

Chinook pilot Flight Lieutenant Chris Greensides said: "This particular load came with its own set of unique challenges. Its relatively unconventional shape made it more complex to rig for transport, also, by design it can create its own lift. To overcome this, we flew slowly to ensure these effects were minimised while under the aircraft."

A Chinook from RAF Odiham's 18(B) Squadron was also flown in to assist at a pumping station near Doncaster following heavy rainfall. It was called in by the Environment Agency to move 40 tonnes of aggregate from a local quarry to an inaccessible spit of land so their engineers could bolster drainage channels and improve the flow of water into designated flood plains. The Chinook's immense lift was able to move all the aggregate in 10 sorties. Assisted by a team from the Joint Helicopter Support Squadron (JHSS) from RAF Benson, the loads were moved using the underslung load capability of the aircraft.

"The Chinook was requested to support a very specific task," said Flight Lieutenant Warr of Silver Command. "The crew from Odiham and team from JHSS have done a fantastic job, working at night in a confined space with precision to deliver safely everything that was asked of them."

The first submarine-hunting Poseidon MRA Mk1 maritime patrol aircraft has been delivered to the RAF. The MOD is investing £3 billion in nine state-of-the-art jets which will enhance the UK's tracking of hostile maritime targets, protect the British continuous at-sea nuclear deterrent and play a central role in NATO missions across the North Atlantic. Following an unveiling ceremony in Seattle, the aircraft was flown to Naval Air Station Jacksonville in Florida where RAF personnel are being trained to operate the aircraft. It will arrive at RAF Lossiemouth later this year.

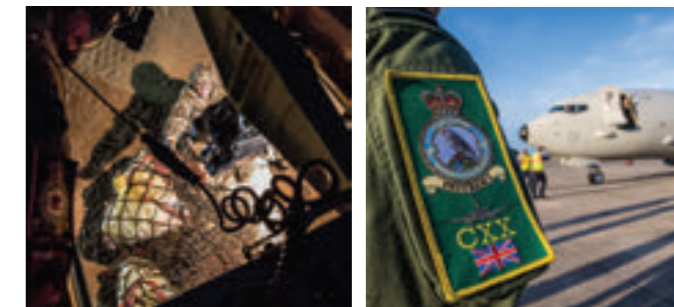


HRH The Duke of Sussex shares a joke with the UK's Invictus Games 2020 team, including (centre left) former RAF medic Rachel Williamson – the first female team captain. ©MOD/Crown 2019

A former RAF medic has been selected as the first female captain of the UK team at the Invictus Games in The Hague in May. Rachel Williamson, who is from Rutland, was discharged in 2014 after picking up what appeared to be an innocuous injury playing RAF rugby. Rachel thought she had sprained her thumb but it developed into a functional neurological disorder, and she ultimately lost the ability to use her arm completely.

"To be selected as Team UK Captain is truly an honour and I feel immensely proud to be given this opportunity," said Rachel.

Current RAF medics have been involved in an airborne exercise to train, practice and provide aeromedical evacuations with partner nations including United States, Australia, Canada and New Zealand. The Aeromedical Evacuation Squadron at Brize Norton took part in Exercise Mobility Guardian at Fairchild Air Force Base in the USA, working specifically on airlift, airdrop, aeromedical evacuation and air refuelling capabilities. The Aeromedical Evacuation Squadron is part of the RAF's Tactical Medical Wing who fly in and out of often very dangerous places to help those in need of urgent medical care.



Chinooks deliver aggregate near Doncaster following heavy rainfall and flooding. ©MOD/Crown 2019

The first RAF P-8A Poseidon taxiing after being delivered to the RAF. ©MOD/Crown 2019

Association members receive a discount on subscriptions to the RAF's fortnightly publication RAF News. Call RAF News on 01909 517 331 or email rafnews@jpress.co.uk. You will need to give your Association membership number to subscribe.

The National Archives (TNA)
 The National Archives at Kew in London has pioneered the digitisation of records relating to the air services. Almost all records are available to visitors or accessible through their website. They can be downloaded remotely at a cost, printed at TNA at cost, or downloaded free at TNA if you have a wi-fi accessible laptop. The main records relating to WW2 airmen are the 'AIR' series; the most relevant parts of which are looked at in this article.

TRACING YOUR RAF ANCESTORS

by Phil Tomaselli



P/O CUNNINGHAM, S/Lt. BLAKE P/O DOLEZAL +
 P/O BRINDEN.

Occasionally, names can be attached to archived photographs, as shown above where pilots at RAF Fowlmere rest during the Battle of Britain. AIR 4/58, courtesy of TNA.

DATE	TIME	TYPE	FROM	TO	REMARKS	AWARDS
1943	7	LANCASTER	U	SELF	USUAL CREW TO HANSTON - BASE.	
1943	8	LANCASTER	U	SELF	USUAL CREW TO HANSTON.	
		LANCASTER	U	SELF	USUAL CREW TO HANSTON - BASE.	
	11	LANCASTER	U	SELF	USUAL CREW LOW LEVEL, OVERT DROPPED AT 40 FT. FIVE ROW OF GROUND (SIGHTING AND SEVERAL AND F.A. TEST.	
	14		U	SELF		
	14		U	SELF	THE UNUSUAL. ALSO. D.F.C. FULL ORAL ADDRESS ON OPERATIONAL CASE AND FOLLOWED BY RET. CONSIDERED SUCCESSFUL.	
	16	LANCASTER	U	SELF	BY ORDER OF THE COMMANDER IN CHIEF. ATTACK ON MOHNE AND EDER DAMS. SUCCESSFUL. DATES. COLLECTED.	

AWARDED V.C. 22/11/43

By September 1945 the RAF had grown from relatively small pre-war numbers to over 940,000 serving members. Tens of thousands more had seen service and been killed or discharged. So it isn't surprising that many of us have ancestors who served our country – and are interested in finding out more about them. Here are some top tips, and details of where to find out more.

When searching for an RAF ancestor from WWII, the first thing to do is find any paperwork you or your family might have. Speak to relatives to see if they have any medals, log books, official papers, letters or memorabilia that might be useful. Ask if they remember any stories they might have been told about where your relative served and what they did. While such stories need to be treated with caution, they often contain information vital in helping you begin your search.

Personal Service Records

Everyone who served in the RAF has a unique service record which gives basic details of their service, where they went, their promotions, medals and next of kin. But records for those who served during WWII are 'closed' to the public. You'll need to apply to the MOD for a copy, and certain conditions must be met before any records can be released. A charge will also apply if you are not next of kin of the individual you are researching. Details of how to apply for these records are available at bit.ly/ServiceRecordsMOD.

While obtaining the individual's service record will be a great help, they are not always easy documents to read. The most important details concern movements (the units he or she was sent to), and promotions. Service records will also detail casualties, wounds, campaigns, medals, clasps, courts martials, decorations and mentions in despatches. Occasionally, additional details of postings are given. There should also be at least some information regarding the individual's character and trade proficiency.

"Led attack on Mohne and Eder Dams. Successful." This simple entry, from the log book of Wing Commander Guy Gibson VC, records the famous Dambusters raid of 16 May 1943. AIR 4/37 (42), courtesy of TNA.

As service records are usually compiled during the period of service, they only detail incidents and movements that will affect pay, pension or medal entitlement. Some small movements or temporary postings may not have been considered relevant. Treat the service record as the bare bones of a career – if there is other evidence that suggests an unrecorded gap or posting, follow it up by looking through other records. Even without a service record though, a great deal can be uncovered by expanding your research into other areas.

Log Books and ORBs

If you're lucky enough to have a relative's log book it can save you a lot of work, as they contain a great deal of information. Everyone who flew regularly was required to keep an up-to-date one. This was partly because flight pay depended upon proving a minimum number of hours had been flown each month. A log book should tell you which squadron the owner was with, which bases they flew from, their aircraft and the type and duration of their flights. It wasn't only pilots who kept log books though, observers and air gunners did too. If you don't have a log book, some do survive in TNA's AIR 4 series. Unfortunately it's only a representative sample, as many unclaimed logs were destroyed in 1959 and only some from the RAF's operations overseas, the Battle of Britain, and major Bomber Command operations were kept.

Operation Record Books (ORBs) are vital for understanding the daily work of RAF squadrons. These reports consist of monthly summaries of events, daily reports and appendices with a wealth of other details such as squadron movements, transfers of individual airmen, leaves, promotions and next of kin addresses. Some also include reports made after each operational sortie, with pilots noting the basic details of their mission plus any mechanical issues, enemy fighters or flak they encountered. All squadron ORBs for the years 1939–45 have been digitised and are available in TNA's AIR 27 series.

Continued...

turn. We reformed towards the enemy and launched the attack in Vics abreast, striking the formation a little to the rear of centre. They were easy meat. We came at them from partially up sun and at great speed as they turned away from us. I led in, and attacked a DO 215, hitting the starboard wing. Great chunks fell off the wing and engine, which stopped. I gave another good burst into the cockpit and more stuff fell off. E/A fell away sideways in a long glide and hit the sea. I broke away, and whilst in a steep turn, a shell hit my starboard wing root and exploded. I felt my leg was wounded and there were 3 or 4 glycol and hydraulic system leaks in the cockpit. I decided to try to return to an

Extract of Flight Lieutenant Forbes' combat report, 303 Squadron, from 7 September 1940. AIR 50/117 (39) 303, courtesy of TNA.

Combat Reports

Compiled upon the return from a mission in which they'd fought an enemy aircraft, the combat report was designed to provide immediate intelligence on enemy aircraft and tactics. Though the format of the forms changed over time, the basic elements remained the same, and included: date and time of combat; squadron; type and number of enemy aircraft; height and location of the action; approximate number of rounds fired; any damage done to the enemy, and any damage or losses to allied aircraft.

The individual writing the report also had the opportunity to explain what happened in more detail. Presented with the space to write their own account, these descriptions can be quite dramatic.

Collected together in TNA's AIR 50 series, these reports provide fascinating snapshots of the war in the air. Since larger bombers – such as the Lancaster – had a crew of seven, you may not find your relative named if they were, for example, the Flight Engineer, Navigator or Wireless Operator. If you have a log book it will usually name the pilot and mention an encounter with an enemy aircraft, so you can search using the squadron, pilot or date. Unfortunately, the AIR 50 series is incomplete, and an unknown number of combat reports don't survive.

Missing Personnel and POWs

A dedicated RAF Casualty Branch was formed in September 1939. The staff undertook research into the whereabouts and fate of RAF personnel listed as missing. Missing Research Sections were established across Western Europe in 1944 "for the purpose of research and enquiry, in liberated territories and those occupied by Allied forces, into the circumstances of air crews reported missing of whom no previous trace has been found". Records of enquiries and investigations carried out are currently being released in tranches in the TNA's AIR 81 series. Some of the material (such as autopsy reports) is distressing, so it is wise to be aware of this before viewing these documents. This material is likely to be of use where a relative was killed or reported missing over enemy territory. At the time of going to print, AIR 81 files available via TNA covered dates up to late November 1941. Later dates will become available in future.

Many thousands of RAF personnel were captured by the enemy during the war. Over the last few years an increasing number of records relating to them have been released to TNA. As the war came to an end, MI9 carried out a mass screening of all prisoners of war. Pre-printed questionnaires were given to all prisoners, and the completed results are in TNA's WO 344 series. The questionnaires ask about place and date of original capture, camps held in, any illnesses suffered, adequacy of medical treatment, interrogations, training received on escape and evasion, escapes attempted, sabotage undertaken, knowledge or suspicion of any collaboration with the enemy and knowledge of any war crimes.

Casualties

If your relative died or was killed during WWII, the best place to start looking for information is the Commonwealth War Graves Commission (CWGC) website at cwgc.org. This has a searchable database of casualties and often provides more details. Content of database entries varies, but can include: name; rank; serial number; date of death; age; squadron; next of kin, and any inscription the family had placed on the headstone. There can also be documents attached to these entries showing the grave's exact location and whether the individual was originally buried elsewhere before being reinterred in a CWGC cemetery. Known as Graves Registration Reports, these can also provide clues on potential crew members. For example, if an individual is buried in an adjacent plot to other RAF personnel killed on the same day, it is possible that these men were all part of the same crew.

Miscellaneous Units

In addition to the front-line squadrons and their immediate support units and bases, the RAF had an enormous administrative and support organisation, each unit of which was expected to keep their own Operations Record Book (ORB). These are held in the AIR 29 series at TNA. Simply browsing this catalogue gives an idea of the number of units involved. A more or less random selection includes ground control interception stations, sector operations rooms, beach balloon units, bomb disposal squadrons, balloon centres, RAF Regiment squadrons, photographic interpretation units, signal centres, photographic reconnaissance units, marine and launch

Squadron operating DUXFORD; Squadron Leader BADER leading Wing consisting of Nos. 242, 310 and 19 Squadrons. Patrolling over LONDON encountered large formation of Enemy Aircraft. Bombers and Fighters. S/Ldr and No. 242 Squadron led the attack and shot down 10. No. 310 (Czech) Squadron shot down 7 and No. 19 Squadron 2. One pilot of 242 Killed (P/O SCLANDERS). One pilot (Sergt. LONSDALE) Baled out and returned to Squadron next day unhurt. Congratulations received from Air Officer Command and Chief of the Air Staff.

Extract from the Operations Record Book of 242 Squadron, RAF Coltishall, September 1940. Ref: AIR27-1471 (49v), courtesy of TNA.

BOOK	No. and Rank	Initials, Name & Honours	Unit	Date of Death	For use
Gr.No.	PLOT 1, ROW A				
1	564032 Sgt. (A/Obs.)	G.W. MARWOOD	114 Sqn. R.A.F.	13.10.39	C.H.
2	40445 P/O (Pilot)	K.G.S. THOMPSON	114 Sqn. R.A.F.	13.10.39	C.H.
3	621435 A.C.2 (W.Op.)	A. LUMSDEN	114 Sqn. R.A.F.	13.10.39	C.H.
4	43028 P/O (Pilot)	J. CUTMORE	106 Sqn. R.A.F.	21.4.41	C.H.
Coll. 5-6	755937 Sgt. (W.Op./A.C.)	W.B. BURRELL	106 Sqn. R.A.F. (V.R.)	21.4.41	C.H.
	43039 P/O (Pilot)	R.M.A. LAKIN	106 Sqn. R.A.F.	21.4.41	C.H.
	547805 P/Sgt. (W.Op./A.C.)	H.E. PRESTON (D.F.M.)	106 Sqn. R.A.F.	21.4.41	C.H.

sections, navy and army cooperation units, anti-aircraft practice camps, servicing commandos, air sea rescue units and ferry units.

Other sources

In addition to official documents, exploring other avenues online can often throw up some interesting information. Searching for RAF ancestors on genealogy websites like Ancestry or findmypast can sometimes put you in touch with other descendants who have new information or even photographs of the person you are researching. Online forums dedicated to researching RAF history can also be goldmines when searching for leads about where to look next, and some forum members are extremely knowledgeable and very willing answer the questions of new researchers.

Inevitably, when seeking an individual, you'll find some records have been destroyed, mislaid, not yet released to the public or have been indexed in a way that their title gives no hint that useful information is contained inside. Persevere, think laterally, try looking further up the command chain for copies of documents that might be relevant and seek out other collections. The simple act of researching can be a lot of fun in its own right.

This gold ring, taken from the site of a Blenheim bomber which crashed near Faumont in France, shows the kinds of material collected in the AIR 81 'enquiries into missing personnel' archive. AIR 81/605 (1), courtesy of TNA.



Graves Registration Report from the Commonwealth War Graves Commission showing four individuals from the same squadron, killed on the same day and buried in two adjacent graves. Cross referencing this with TNA documents shows these men were the crew of a Hampden bomber shot down over Cologne on 21 April 1941. ©CWGC



Family photograph of Hubert 'Bert' Preston DFM, uploaded to a genealogy website. Bert was part of the crew of the Hampden bomber mentioned in the caption above. ©Helen Dwyer

Phil Tomaselli has researched the RAF for 30 years, writing numerous articles and two books for Pen & Sword: 'Air Force Lives' and 'Tracing your Air Force Ancestors: a Guide for Family Historians'. Members can get 25% off the second edition of this latter book by calling 01226 734222 or visiting pen-and-sword.co.uk, quoting the code TAFA25.

RAF AT WAR

by Chris Goss

At 1400hrs on 23 August 1943, two Bristol Beaufighters of 603 Squadron took off from Berka III airfield in Libya on an offensive sweep around the Greek island of Zante (Zakynthos); now a popular holiday destination. Arriving over the island at 1620hrs, the pair attacked a 500-ton ship which was moored in the harbour.

Having dropped their bombs and strafed the vessel with gunfire, Pilot Officer J.C. Dalziel and Sergeant J.H. Davies suddenly saw the second Beaufighter make a steep bank to starboard after presumably being hit by flak. Its wingtip struck the surface of the water before the aircraft plunged into the sea, killing crewmen Flight Lieutenant John Crompton and his navigator Sergeant Henry Griffiths. Dalziel's Beaufighter was also hit but took evasive action and headed home, landing safely at Berka at 1840 hrs.

John Crompton, who was to be posthumously promoted to Squadron Leader, was the 24-year-old son of Ralph and Josephine Crompton of Market Drayton, Shropshire. They had already lost one son, John's elder brother Ralph Kenyon (known as Ken), when he was shot down flying a Spitfire of 611 Squadron over Dunkirk on 2 June 1940.

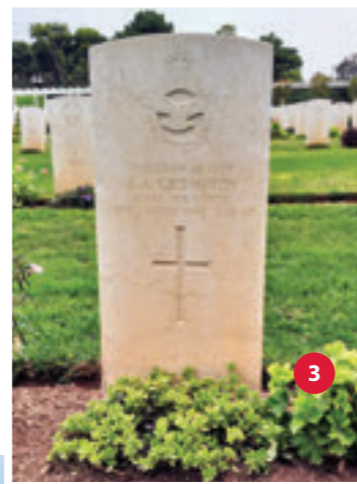
Both Crompton and Griffiths were initially interred side by side in Corinth Civil Cemetery, but in September 1945 they were reburied in similarly adjoining graves in the Commonwealth War Graves Cemetery at Phaleron, south-west Athens.



1. Ships in Zante harbour at the time of the attack. ©Chris Goss

2. Moments after Crompton's Beaufighter sank, with spray still visible on the surface. ©Chris Goss

3. Grave of John Crompton. ©CWGC



4. Document detailing Crompton and Griffiths' removal from Corinth Civil Cemetery to Phaleron cemetery in Athens. The concentration of cemeteries allowed otherwise unmaintainable graves to be moved into established war grave cemeteries where the Commonwealth War Graves Commission could ensure proper commemoration. ©CWGC



5. Phaleron War Cemetery. ©CWGC

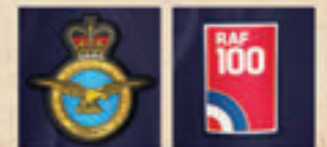


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World military aviation news

by Martin Henderson



Israeli Air Force F-15 Baz at RAF Waddington Oct 2019. © L Peacock



Indian Air Force C-17A at RAF Brize Norton Nov 2013. © J M Henderson



Italian Guardia di Finanza ATR 72MP. © Leonardo



The first two Air National Guard F-35s arrive at Burlington, Vermont. © Lockheed Martin

Australia



The Royal Australian Air Force is to deploy one of its new P-8 Poseidon maritime surveillance aircraft to the Persian Gulf towards the end of 2019 to support the international maritime security mission in the region. This follows on from the force's receipt of their tenth Poseidon in August; two more are still to be received from the initial order.

The Royal Australian Air Force sent six of its 'legacy' FA-18A Hornets from No 77 Squadron to Japan in September 2019 for their first ever air combat exercise with the Japanese Air Self-Defense Force. The Australians were based at Chitose Air Base in Northern Japan and the deployment was supported by RAAF KC-30 tanker transports and C-17 and C-130 airlifters.

Bangladesh



The Bangladesh Air Force has received the first of five ex Royal Air Force C-130J Hercules transports from Marshalls of Cambridge. The remainder should be received by the end of this year after overhaul and upgrade. These aircraft are replacing a similar number of older Hercules that have been in service for many years.

Brazil



The Brazilian Air Force has taken delivery of the first of 28 Embraer KC-390 transport aircraft that it has on order. They will be based at Anapolis airbase outside the capital, Brasilia, with the First Troop Transport Group. Embraer has also received the first firm export order for this aircraft – Portugal has recently committed to five machines – and is hoping for further sales to Argentina, Chile, Columbia and the Czech Republic in the near future.

France



The French Navy is to retire its last eight Westland Lynx shipborne anti-submarine helicopters next year. They currently serve with Flottille 34F at Lanveoc-Poulmic helicopter base in Brittany.

The French Air Force has received the first of two KC-130J Hercules aerial refuelling tankers at its Orleans-Bricy transport base where it has joined the two transport versions already delivered. The tanker model will allow the air force to refuel their Caracal troop-carrying helicopters in flight.

Germany



Germany has decided to replace its Westland Sea Lynx fleet of anti-submarine helicopters in the next decade with the NH90 Frigate Helicopter. These will add to the batch of broadly similar helicopters already ordered to replace the Westland Sea King in the search and rescue and troop transport roles. The latter are already in production.

India



The Indian Air Force has acquired the last undelivered Boeing C-17 transport aircraft, bringing its fleet to 11. This makes it the second largest in the world after the United States Air Force.

Israel



The development of the Israeli Air Force F-35 Lightning II force continues with the recent formation of the second squadron, No 116, at Nevatim Air Base. It should receive its first aircraft, known as the Adir in Israel, early next year. The first squadron, No 140, is already operational at Nevatim.

Italy



The Italian Air Force temporarily deployed six of its F-35A Lightning II fighters on their first NATO mission last October, becoming the first operator of this aircraft to do so. The mission was air policing in Iceland, a task that takes place several times a year and lasts for several weeks each time.

The Guardia di Finanza has ordered three more maritime patrol versions of the ATR72 airliner to add to the initial one they signed for last year. The latter is due for delivery by the end of 2019 with these additional aircraft due by 2022. The Guardia di Finanza is a militarised police force responsible for, among other duties, securing Italy's coastline against smuggling and drug trafficking.

Japan



Japan has decided to obtain a small fleet of F-35Bs, the short takeoff/vertical landing variant operated by the Royal Air Force, to add to its fleet of the normal F-35A that uses standard runways. They are planning to acquire 42 of the B models for use on their Izumo-class helicopter destroyers pending the development of new vessels later in the decade.

Saudi Arabia



The first of 22 locally-assembled BAE Hawk advanced jet trainers has been completed in the Kingdom using a kit supplied from the UK. These jets will augment the 22 already provided from the BAE factory at Warton in Lancashire.

Singapore



The Republic of Singapore Air Force has withdrawn its four Boeing Stratotanker aerial refuellers from service after twenty years. They were originally acquired from surplus United States Air Force stocks. Six Airbus A330 Multi-Role Tanker Transport aircraft will eventually enter service to replace them.

German Navy Sea Lynx at RIAT 2017 © J M Henderson



South Korea



The South Korean Air Force has received its second batch of four F-35A Lightning IIs from a total of forty on order. The whole fleet should be in service by 2022 with at least another two by the end of this year.

USA



The United States Air Force's future strategic bomber, the B-21 Raider, should make its first flight in late 2021 with service entry following in the middle of the decade. The Air Force is currently examining where to base the fleet.

The current USAF strategic stealth bomber, the B-2A Spirit was deployed to RAF Fairford in September this year for theatre integration and flying training in the European environment. Three aircraft from the 509th Bomb Wing at Whiteman Air Force Base in Missouri were involved.

The United States Navy has received its first Grumman E-2 Hawkeye capable of being refuelled in-flight, with the fuel probe now installed above the cockpit. The aircraft has joined the fleet training squadron at Norfolk Naval Station in Virginia and two Hawkeye fleet squadrons should possess this new capability by the end of next year. The Hawkeye will be able to accept fuel from several different navy and air force tanker aircraft.

The US Air National Guard received its first two F-35A Lightning II fighters at its Vermont Air Guard base at Burlington in September 2019. Several more should arrive by the end of the year and a total of twenty will be received in due course. The Air National Guard is responsible for the air defence of the United States.

The US Air Force's Air Combat Command has contracted with seven civilian companies to provide aerial combat training services over the next five years using their own fleets of fighter aircraft such as Mirages, Skyhawks and Hunters.

Traditional Cherry Cake

In the depths of winter, what better way to forget the cold than by treating yourself to some traditional cherry cake. This special recipe comes from Flowerdown House Hotel chef Amanda Gilmore and is always in demand among the residents.

"This is a family favourite," says Amanda. "My mum always made lovely cherry cakes, which I still ask her to make today. I wanted to share this personal recipe for the happy memories it brings back of time spent with my mum and family."

Amanda joined the team at Flowerdown House – the Association's Wings Break Hotel in Weston-super-Mare – so she could support the guests by doing what she does best. "Those who have served their country must always be honoured and valued" says Amanda. "I thought the position of chef at Flowerdown House would enable me to do this – and it certainly has. My favourite part of the job is when a guest tells me the meal I prepared has been enjoyed and appreciated."

Before starting her bake, we asked Amanda for her top tip to ensure a gorgeous cherry cake. "Before adding the glacé cherries, wash them free of their syrupy coating then dust in flour" she said. "This helps to keep the balance of sweetness right, plus it helps to prevent the cherries from sinking while cooking".

Ingredients

7oz (198g) glacé cherries, washed and dusted in flour
 8oz (227g) self-raising flour
 6oz (170g) butter
 6oz (170g) caster sugar
 1.25oz (35g) ground almonds
 3 eggs

Method

- Place the flour, butter, sugar, ground almonds and eggs in a bowl and beat together
- Carefully fold the prepared cherries into the cake mix
- Line a 1lb loaf tin with greaseproof paper, then pour in the cake mix
- Bake in oven at 180C, 350F or gas mark 4 for 45-60 minutes
- Confirm the cake is cooked by inserting a skewer into its centre. If you remove the skewer and see no signs of residue – it's done
- Once cooked, turn out of tin and allow to cool
- Once cooled – slice and enjoy!



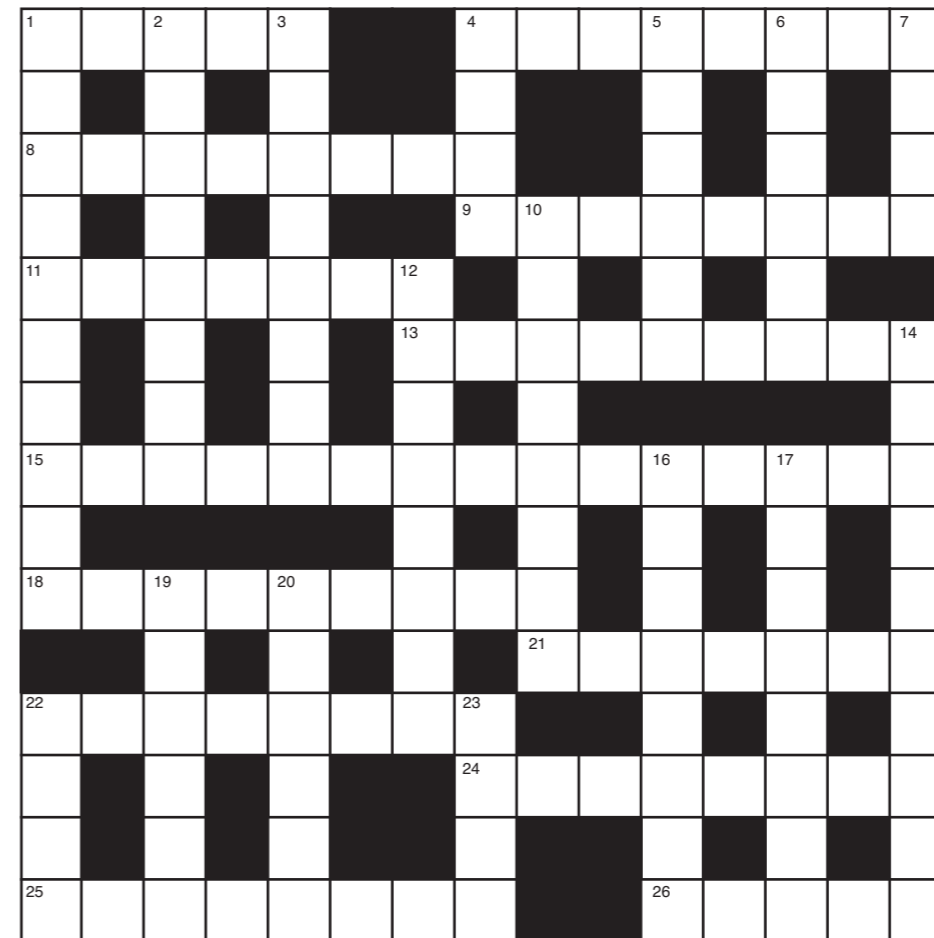
Amanda Gilmore preparing the family recipe at Flowerdown House Hotel.



Traditional cherry cake.
 All images ©RAF Association

New Year 2020 Crossword

by Enigma



Across

- 1&21 Greeting on 1/1 (5,3,4)
 4 Woodwind instrument (8)
 8 Can't appreciate musical pitch (4-4)
 9 Let heats sort out runners (8)
 11 Disruptive jeerer (7)
 13 Livelihood (9)
 15 Submarine (10,5)
 18 However, not so learned (9)
 21 See 1 across
 22 Cradle for dog inside (8)
 24 Irritating (8)
 25 Eg, Spitfires and Hurricanes (8)
 26 Strength (5)

Down

- 1 Score 50 with 'arrows' (3,3,4)
 2 Struck by fright, father was arrested (8)
 3 'Up and down' singer, possibly from Switzerland or Germany (8)
 4 Our organisation (1,1,1,1)
 5 An American cat (6)
 6 Bond: Timothy (6)
 7 Sheep could be from Mars (4)
 10 A score! (5,3)
 12 Is aunt one? Not absolutely though (8)
 14 Stage direction – but not 'leave left' (5,5)
 16 E.g. rest area for military people (8)
 17 Purloining (8)
 19 Result of (Shane) Warne's spinners (6)
 20 Maker of outer garments (6)
 22 Cruelly beat a Greek character (4)
 23 Soundly educated but tense (4)

The solution to this crossword can be found on page 64.

anagrams • samarang • naga arms • anam rags • nama rags • mana rags • aram sang • masan gar • mara sang • aram snag • naga arms • anam rags • nama rags • mana rags • aram sang • masan gar • mara sang • aram snag • samarang • anagrams • samarang • naga arms • anam rags • nama rags • mana rags • aram sang • masan gar • mara sang • aram snag • samarang

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Remembering

John Whitworth DFC

Flight Lieutenant John Leslie Whitworth DFC completed 87 sorties during the Second World War, flying both Wellington bombers and Mosquitos.

Born in 1921, John volunteered for RAF air crew in 1940 and was called up in 1941. He completed 37 operations and survived an emergency night landing in the desert and an airfield accident when an aircraft crash-landed into his Wellington in the dispersal area at Abu-Sueir.

When his tour ended in early 1943, John returned home and became an instructor on Wellingtons. Following the death of a close friend, he volunteered for a second operational tour and joined 8 Group (Pathfinder Force) on Mosquitoes in September 1944.

Flying with 142 and then 162 Squadron, John was part of the Light Night Striking Force used for bombing and diversionary raids to draw German fighters away from the main force. He had another near miss when a piece of flak struck his Mosquito, injuring his navigator.

John completed 50 sorties to Europe and in 1945 was awarded the DFC. He then joined Transport Command as a ferry pilot before being posted to India and Burma for the build-up of 'Tiger Force'; but the dropping of the atomic bombs on Japan halted this plan. After a few months in administrative roles he returned home and was demobbed in May 1946.

Returning to Sutton Coldfield, John married Audrey Girling in 1950 and joined his brother-in-law in building up a substantial manufacturing works in steel fabrications in Birmingham. He played golf for Warwickshire nearly 100 times, winning numerous championships including English Senior Open Amateur Championship in 1982 and Midland Senior in 1985.

A member of the RAF Association, the Aircrew and the Pathfinder Associations, John felt uneasy that there was a reluctance after the war to give Bomber Command the credit it deserved and became a strong supporter of the Bomber Command Memorial in London and the International Bomber Command Centre (IBCC) in Lincoln. In 2016 John was interviewed about his time in the RAF by the IBCC, with the audio and transcript available online at bit.ly/JohnWhitworthDFC.

John Whitworth passed away in Harrogate on 14 June 2019. He is survived by his two sons and four grandchildren.



John Whitworth DFC. ©Carr-Whitworth family archive

Kenneth Chalcraft

Kenneth Chalcraft was born in 1925 in Hampshire. He joined the RAF in 1943 and was posted to Bomber Command's 9 Squadron at RAF Bardney in Lincolnshire.

As a mid-upper gunner in Lancasters, Kenneth flew in more than 20 sorties before the war ended, achieving the rank of Flight Sergeant. Leaving the RAF in 1947, he married his sweetheart, Judie, a few months later. After working as a grocer, he embarked on a career in the Post Office and British Telecom, eventually retiring in 1990.

Kenneth died on 17 October 2019 at the age of 94, in his hometown of Emsworth, Hampshire. In the final years of his life he was introduced to RAF Association befriender Lorie Coffey, who is currently working to complete a sculpture in his memory.



Kenneth Chalcraft. ©Pamela Blackwell

AD ASTRA

We record with sadness the passing of the following members of the RAF Association

Mr J Abrahams	Orpington RMG	Mr F Few	Alresford and District	Mr K P Lowe	Swiss
Mr C Adams	Caduceus	Mr B Flower	Headquarters Branch	Mr B Mabey	Basildon
Mr H Allen	Scunthorpe	Mr A Fox	Crawley RMG	Mr A Marlow	Horsham and Storrington
Mr T A L Ashton	Lowestoft	Mrs S Freeman	Birmingham and Sheldon	Mr B Mateer	South East and Eastern Area HQ
Mr B Atkins	Tamworth	Mr J W Frid	Cambridge	Mrs E Matthews	Wisbech
Mr P S Ballard	Tamworth	Mr E Fullerton	Hull	Mr T D McCormick	Wales, Midland and South West Area HQ
Mr G J Baxter	Yaxley and District	Mr W W T Gibbons	New Milton and District	Mr J McManus	City of Bristol
Mr H J Bennett	Ely	Mr J Gilpin	Wantage and District	Mr J Miles	Fleet
Mrs M Bennett	Aylesford and Malling	Mr P Godley	Eastbourne	Mrs P Miller	Grimsby, Cleethorpes and District
Mr D Blasdale	Wales, Midland and South West Area HQ	Mr R E Gouarin	Guernsey	Mrs P A Miller	Newark
Mr L Boon	Torquay	Mr E Green	Stevenage	Mr P Morgans	Poole
Mr B Bowden	Hailsham	Mrs G R Green	Stevenage	Mr G Nobles	Sturminster Newton and Gillingham
Mr A Bradley	Carterton and Brize	Mr D Guerin	Kenley and Caterham	Mr E North	Enfield
Mr R H Brierley	Burnham-On-Sea	Mr K Harper	Cheltenham	Mrs P A Miller	Newark
Mr H Brothers	Wales, Midland and South West Area HQ	Mr J Harrington	Thirsk	Mr P Morgans	Poole
Mr A Burgess	North Weald and Ongar	Mrs I Hart	Rutland	Mr G Nobles	Sturminster Newton and Gillingham
Mr R Cambridge	Chislehurst and Sidcup	Mr A Hartley	Abbots and Kings Langley	Mr E North	Enfield
Mr J Carter	Medway Towns	Mr A Hay	Bognor Regis	Sqn Ldr W Norton	Sherborne
Mr D Cayless	Leicester	Miss E Hayward	Horsham and Storrington	Mr G Overton	Letchworth, Hitchin and District
Mr J Chapman	Yaxley and District	Mr A Hewett	Bognor Regis	Mr C F Paintin	Windsor and Eton
Mr W Clark	1066	Mrs T Higgins	Birmingham and Sheldon	Mr E Perry	Penzance
Mr K D Clifford	Clacton-on-Sea	Mr C Hignett MBE	Addlestone and Chertsey	Sqn Ldr B Pierce	Wales, Midland and South West Area HQ
Mr L Cockram	Cwmbran	Mr G Hili	Malta GC	Mr H Pinching	Swansea
Mr Ray Coker	Peterborough	Mr N Hoogteyling	Amsterdam	Mr P Pountney	Grimsby, Cleethorpes and District
Rev N Compton-Dando	Braunstone	Mr F R Horne	Worthing	Mrs H Price	Romsey
Mr P Crook	Tamworth	Mr B Hunt	South East and Eastern Area HQ	Mr P Proctor	Ormskirk
Mr J Curran	Stafford	Mr J Irvine	Ayr and Prestwick	Mr G Richards	Mablethorpe and Sutton-on-Sea
Mrs K Dalley	Costa del Sol	Mr R L Jenkins	Sturminster Newton and Gillingham	Mr F Richardson	Abbots and Kings Langley
Mr A Davies	Llangollen	Mrs K Johnson	Rotherham and District	Mr J Ritchie	Fraserburgh
Mr M G Davies	Wales, Midland and South West Area HQ	Mr S Jones	Wales, Midland and South West Area HQ	Mr J Roberts	Costa del Sol
Mrs I Deere	Stone and District	Mr J R Jukes	Hartlepool	Mr G Rock	Romsey
Mr R R Dolton	Shrewsbury	Mr L R Keir	South East and Eastern Area HQ	Mrs E Rogan	Carrickfergus
Mr R Dorey	Newcastle-under-Lyme	Mr L Kent	Oxford and District	Mr E Rosser	Salisbury RMG
Mr J Dumbleton	Cranbrook and Hawk RMG	Mr L Killick	Christchurch	Mr J Ryan	Guernsey
Mr P Eaton	Exmouth	Mr P Knight	Stafford	Mr P Saunders	Mid-Somerset
Mr C Elliott	Wymondham	Mr J Leahy	1066	Mr E D B Savage	Mid-Somerset
Mr G Fairbrass	Hinckley and District	Mr F Leathers	Leicester	Mrs J Sawyer	Johannesburg
Mr J E Farrar-Taylor	Brighton and Hove	Mr L Leman	South East and Eastern Area HQ	Mr J Schofield	Lisburn
Miss P Fenner-Smith	Guernsey	Mr P W Lewis	Oxford and District	Mr W Schooling	Hythe and Romney Marsh
		Mrs D G Lord	Clacton-on-Sea	Mr R H Sellers	Kenley and Caterham
				Mr J Sile	Stowmarket and District

Wg Cdr J H Simpson AE DFC OBE
Republic of Ireland

Mr L R Smith Fareham
Mr R Smith Fleet
Mr L Smith Leicester
Mr D Smith Rugby and District
Mrs P Smith Wales, Midland and South West Area HQ

Mr R Stacey Amsterdam
Mr D Stanley Uxbridge
Mr F Starkey Dunstable
Mr R Stow DFC DFM
Royal Leamington Spa, Warwick and District

Mr T C J Summers Oxford and District
Mr R A Swarbrick Stevenage
Mr M Synnott Republic of Ireland
Mr R Talbot Melton Mowbray
Wg Cdr T Underwood MA
Sudbury

Mr R B Vincent Weymouth and Portland
Mr J Wallis North Weald and Ongar
Mr L J Warren Addlestone and Chertsey
Mr J Watkins Rotherham and District
Mr M E C Weller Shaftesbury
Mr M Westaby Skipton
Mr N Westby Lancaster and Morecambe
Mr D H White Coventry
Mr A Whitworth Rothbury
Mr T Williams Llandaff and Ely
Mr D Williams Uxbridge
Mr S Willis Biggin Hill RMG
Mr G Wilson Barry
Mr D D Wood Isle of Wight
Mr P Wright Basildon

We specially remember those who had reached or passed their 100th birthday:

Mr S Fielding Preston

Please note: Air Mail cannot accept any obituary notifications direct. They must be notified to the member's branch or area office. Alternatively, call our Customer Care Team on 0800 018 2361.



Notices

Why not announce your engagement, marriage or the birth of your child - or grandchild - here? It's free and will get directly to 53,000 of your current and former RAF colleagues.

Old Colleagues



Looking to make contact with anyone in the photograph, **RAF Episkopi Station Team 1968-1970**, in particular Jimmy Drysdale, Ian Boyle, Ginge Gardiner, Dave Luffman. Also anyone not in the photo but who played, such as Graham Chamberlain and Bob Edwards. Contact already established with some, and hopefully a reunion can be arranged. Contact noel.mcgrath@ntlworld.com or 07756459556.

I would be most appreciative for any current information about **Squadron Leader A. Hines** who was C.O. at the RAF Unit Combined Task Force at Maralinga Range, South Australia from 1958 to 1960. Please contact Sirarthurlawrence@btinternet.com with any details.

Hugh Wallace (ten-year-Tom) is looking for **Senior Technician Michael (O')Connor**, stationed at RAF Halton in the early to mid-1980s. Last met over dinner at the Sergeant's Mess at RAF Halton. Also served together in Germany at the hospital in Wegberg, where Michael remained when Hugh was demobbed. Michael possibly moved to Ely, Cambridge upon his own demob. Call 01840 230094.

Seeking catering staff from **RAF Hospital Akrotiri, 1960**: Curly, Nosh, Shaun Pearl, Graham Martin etc. Please contact Chris Attlesley on 01262 675577 or email sculptchrisart@gmail.com.

Seeking colleagues who worked in the control tower at **RAF Luqa, Malta GC** during 1956 (Suez Campaign) and 1957. Please contact Keith Thomas at iris.thomas@wanadoo.fr.

Welcome extended to anyone who served at **RAF Changi**, including HQ FEAF between 1946 and 1971. See www.rafchangi.co.uk for joining information or apply to Malcolm Flack, Membership Secretary 01494 728562, memsecchangi@telco4u.net for free enquiry pack.

SOLUTION: NEW YEAR 2020 CROSSWORD
Across: 1 Happy; 4 Recorder; 8 Tone-deaf; 9 Athletes; 11 Hecker; 13 Existence; 15 Underwater craft; 18 Leastwise; 21 New Year; 22 Bassinet; 24 Annoying; 25 Aircraft; 26 Might.
Down: 1 Hit the bull; 2 Panicked; 3 Yodeller; 4 RAFA; 5 Ocelot; 6 Dalton; 7 Rams; 10 Twice ten; 12 Relative; 14 Enter right; 16 Crewroom; 17 Annexing; 19 Answer; 20 Tailor; 22 Beta; 23 Taut.

Reunions

Were you a member of **No 9 Technical Cadets Entry** at the RAF Technical College Henlow in October 1960? If so, and if you have not been contacted already, would you be interested in attending a 60th Anniversary Reunion at the IWM Duxford on 2 October 2020? For details please contact John Blakeley on 01263 861008 or e-mail jbcconsult@btinternet.com.

RAF Administrative Apprentice Association's 2020 AGM and Reunion Dinner will be held at the Northampton Marriott Hotel, weekend 12/13/14 June 2020. For further details please contact www.rafadappasn.org.

The 50th anniversary reunion of **RAF Locking 119/219/404 Apprentice Entries** will be held in October 2020. An informal evening on 23 October will allow ex-apprentices to gather before the formal dinner on 24 October, which will take place in the Ballroom of the Weston-super-Mare Winter Gardens, BS23 1AJ. Reunion open to all apprentices and partners. For further details contact Barry Cox at barrycox124@hotmail.com.

318th Admin/Craft Apprentices at RAF Hereford are organising a reunion on 1 May 2020 to celebrate 50 years since their attestation into the RAF. Eleven attendees so far. Anybody else who would be interested in attending please contact Paul Leggott at pleggott53@gmail.com.

Other

Missing. Spoon used by Guy Gibson when he visited RAF Mildenhall. Recently sent as a gift to 617 Squadron at RAF Marham to display in office or museum but never arrived. Spoon has dog-tag attached which states its provenance and how it was obtained by one Tom Pearce who served Gibson in the mess. Contact john650howe@hotmail.com with any information.

Did you train as an **Apprentice Supplier or Clerk** at RAF Ruislip, St Athan, Bircham Newton, Halton or Hereford? Please contact www.rafadappasn.org for details of your association.

Paul Bell is seeking contact with **Air Commodore (Ret) Joe Hardstaff MBE** with regards to researching some cricket and family connections with the Allin family in Nottinghamshire. Any information would be gratefully received and should be sent to: paulbell274@hotmail.com.

Submit your notices – free for all members

The service is provided free as a member benefit to help members keep connected with people and places from their time in the RAF or the RAF Association, or to announce news of births, marriages, christenings, engagements, and more. Terms and conditions are:

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- Text/copy to a maximum of 60 words or 500 characters with spaces, whichever is the greater
- One photograph can be published with each notice (space permitting)
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- Not to be used to promote profit-making ventures
- May be used to promote giveaways or sales of items where the money raised will be donated to the RAF Association
- No other charities or profit-making organisations can be advertised
- Must follow normal guidelines of being legal, decent, honest and true
- Editor's decision is final

Email your text to notices@rafa.co.uk, post it to the address on the inside front cover or call 0800 018 2361.

Deadline: Notices for the April - June 2020 issue of Air Mail must reach the magazine's offices by: **14 February 2020**. Acceptance of submissions may close earlier if the pages are full. Only submissions made by email will be acknowledged.

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