

Chiltern Airwords



Some of the 'Daks over Duxford 2019' line up, in advance of the flypast from Duxford to Normandy, to commemorate the 75th Anniversary of D-Day. Approximately thirty-four Douglas DC-3 and C-47 (and variants) were scheduled to take part but due to various problems on the day the flypast was about ten aircraft short on the total. **Photo; John Roach**

The Chiltern Aviation Society Magazine
July and August 2019

CHAIRWORDS

A belated thanks to Robert Urquhart and John Roach for the wonderful flight to Turweston recently to celebrate my 90th birthday. To land there 74 years after my last visit seemed very strange. That early occasion was our annual ATC camp when the airfield was an OTU equipped with Wellington Mk Xs. The long runway is still there but much narrower than it was in 1945. It was wonderful to wander round and see all the active restoration work being carried out on a number of old airframes. Also, congratulations to our patron David Ogilvy OBE who recently celebrated his 90th birthday. In a recent issue, *Aeroplane Monthly* printed a wonderful appreciation of his achievements in the aviation world. From flying Mosquitos with the Royal Air Force, to CFI at Elstree, General Manager at Old Warden with the Shuttleworth Trust and his fight to keep open UK airfields; the list goes on. We are so grateful to his ongoing support to Chiltern Aviation Society which means so much to us. **Keith Hayward.**

EDITORWORDS

Note to contributors; When emailing articles for Airwords, to cas.clubsecretary@outlook.com please send the words and any photo captions in MS Word Times New Roman, Font Size 11 format without any photos or images included in article. Photos and images need to be sent separately in JPEG format. This greatly helps with formatting. Thanks
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THE CHILTERN AVIATION SOCIETY (CAS); Founded in 1968. Associate member of Air Britain Historians Ltd.
President; Philip Birtles. **Patron;** David F. Ogilvy OBE FRAeS. CAS Membership £15 PA. Non-Members also welcome at our monthly programme of talks for a small contribution of £2 per event.

MEETINGS: Fourth Wednesday of the month (third in December) 8pm to 10 pm at *Ruislip Methodist Church Hall, Ickenham Road, Ruislip, Middx, HA4 7BX*. Plus, our Mid-month Pub Socials, Wednesdays, 8pm *The Coach & Horses Pub, 1 High Rd, Ickenham, Uxbridge UB10 8LJ*. Please contact CAS for exact date of the mid-month.

2019 PROGRAMME;

WED Aug 27th - Light Aircraft at Denham - **Eva Ceh** (Confirmed)
WED Sept 25th - The North Atlantic Challenge - **Jim Davies** (Confirmed)
WED Oct 23rd - President's Evening - Philip Birtles
WED Nov 27th - HQ Aviation Helicopters – Quinten Smith
WED Dec 18th - Members Evening (confirmed)

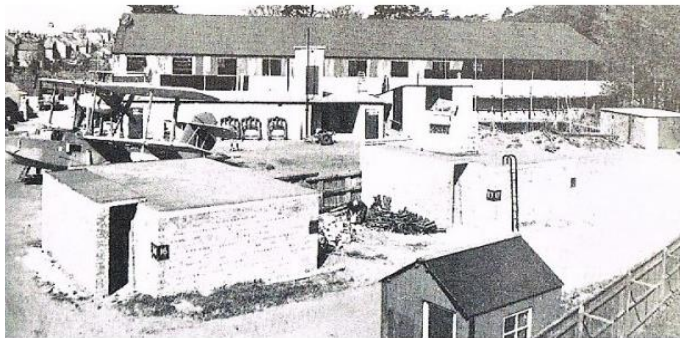
A HELL OF A DRAUGHT – CAPTAIN ROBIN MACILWAINE DFC (BSAA/BOAC) - By Keith Hayward

On 13th July 1949 BSAA Avro York G-AHFG *Star Haze*, operating service number BA221 to Buenos Aires, flew into a violent hailstorm between Rio de Janeiro and Montevideo. First Officer Robin McIlwaine, flying as Navigator assisting Captain Fieldson, was at his desk trying to concentrate on his charts as the aircraft hit the turbulence. Suddenly the York's windscreen shattered as huge hailstones burst through into the cockpit and beyond. Captain Fieldson and the co-pilot were virtually blinded by the force of the slipstream and the hailstones which caused havoc as far as the forward cabin. There was a hell of a draught. With great presence of mind McIlwaine grabbed the aircraft's heavy technical manual nearby, threw himself forward and stuffed the book into the space vacated by the shattered windscreen. Captain Fieldson could now see more clearly as an emergency was declared and McIlwaine was able to direct him to Porto Alegre, Brazil, for a successful landing bearing in mind one engine was also out of action. A magnificent team effort.

Robin McIlwaine, from Devon, joined the Auxiliary Air Force in 1939 at the age of 19 and trained as an armourer. He serviced Spitfires during the Battle of Britain and was selected for pilot training in December 1940. He was sent to the USA to commence his course but unfortunately, he suffered severe bouts of sickness and was remustered as a Navigator. He returned to the UK and in early 1943 was posted to No7 Squadron of the Pathfinder Force; he completed 45 operations and was awarded a DFC. He stayed with the squadron in a training capacity but managed to wangle a place on some more operations including the famous Dresden raid on 14 February 1945, by which time he was a Squadron Leader.

At the end of the war he was selected by Air Vice Marshal Don Bennett to join the newly-formed British South American Airways as a Navigation Instructor. He was kept very busy as, unlike BOAC, BSAA did not include specialist navigators in their crew lists. Each pilot was required to obtain a 1st Class Navigator's Certificate within six months; this was a tough challenge for McIlwaine. Later, Bennett told him that he must convert to pilot status as a First Officer and he could obtain his commercial licence on the Corporation's communications aircraft, the tiny Percival Proctor G-AGTH *Star Pixie* – as long as he paid for the petrol! Thus, equipped Mac continued as a First Officer on Lancastrians and Yorks on the East Coast Buenos Aires route until the BSAA-BOAC merger in July 1949. He then flew Argonauts with BOAC on the same route. He later obtained his command and flew Boeing 707s until retiring from British Airways in 1975, although he continued to fly with Iraqi Airways for a few more months. Robin McIlwaine passed away on 22 April 2013 at the age of 92 – another of that illustrious band of pilots generated by World War 2.

Walrus at Weybridge Trading Estate



In Answer to Brian Jones's query in the last issue; Putnam book "Saunders and Saro Aircraft since 1917" by Peter London provides a clue. In Appendix 2, it lists the Walrus and Sea Otter production by Saro, then in Appendix 3, there is a list of Saro plants during WW2. One of them is Weybridge Trading Estate, Addlestone, which built Walruses. Completed aircraft were then towed about half a mile along a track to Chertsey Mead to fly off to where ever they were needed, and without using Brooklands. (LH)

Vera Lynn's Private Jet



Brian Jones spotted an interesting article in the *Times* on 7th June 2019 obviously confirming the Times Defence Correspondence, Lucy Fisher has access to information that has not been revealed to the public before. According to the article Vera Lynn, now 102, heard about D-Day while travelling back home via North Africa in her private jet, only 19 years before the first Learjet!



Daks over Duxford May 31st and June 4th 2019 - by John Roach



Above, Eight of the 24 Dakotas seen on a cloudy and wet day at Duxford on 4th June 2019. Photo John Roach

Together with fellow Chiltern member Robert Urquhart and colleague Fred Barnes we visited Duxford (by air from Denham) on Thursday 30th May to photograph the 11 Dakotas that had just arrived from the USA. And we returned on the Tuesday to see the other 13 aircraft that had come to the Cambridge airfield to commemorate the D-Day landings of 1944. Due to the poor weather there was a very restricted flying display which was a pity, but just to be present to see 24 Daks on the same airfield was an experience to be remembered for a very long time. The under mentioned list includes those aircraft that did participate. **Credit; Fred Barnes, Robert Urquhart, FAA, Air Britain and D-Day Squadron.**

NC24320 c/n 20197 Johnson Flying Services titles owned by Museum of Mountain Flying
HA-LIX Li2 c/n 18433209 in Malev colours named '*Kaman Todor*' from The Goldtimer Foundation of Hungary
N8336C c/n 7313 in Civil Air Transport colours owned by JM Air LLC
N25641 c/n 9059 Legend Airways colours owned by JB Air Services LLC
NC33611 c/n 34378 Pan Am World Airways '*Clipper Tabitha May*' owned by PMFG Flight Operations LLC
N473DC c/n 19345 coded 3X named '*Drag em Oot*'
N47TB c/n 12693 'That All Brother' coded 3X 42-92847 ex N88874 '*Puff*', owned by American Airpower Heritage Flying Museum.
N47SJ c/n 25869 coded 340608/CD named '*Betsy Biscuit Bomber*'
N103NA c/n 9531 Flabob Express (fake c/n 33569 on external plate, this frame was b/up at Croydon Jul'54)
N877MG c/n 20806 Pan American World System owned by Historic Flight Foundation
N47E c/n 13816 serial 0-30665 named '*Miss Virginia*' owned by Dynamic Avlease Inc
N45366 c/n 11757 serial 268330/R (tail) CU (nose) named 'D-Day Doll'
N74589 c/n 9926 serial 224064/ID named '*Placid Lassie*'
N147DC c/n 19347 serial 0100884 coded S6 owned by Aces High US Inc
K-682 /OY-BPB c/n 20019 Danish AF '*Gamie Dame*' owned by the Association for Flying Museum Aircraft
N18121 c/n 1997 a bird in flight artwork on the nose, owned by Blue Skies Air LLC
F-AZOX c/n 33352 Chalair Aviation
SE-CFP SAS c/n 13883 named '*Daisy*' owned by Flying Veterans Association
N150D c/n 4463 serial 315087/9X '*The Duchess of Dakota*' owned by Aircraft Guaranty Corp
N431HM c/n 9995 '*Swissair*' owned by Aircraft Guaranty Corp Trustee
LN-WND c/n 11750 serial 268823 named '*Little Egypt*' owned by the Norwegian Air Force
OH-LCH c/n 19309 Finnair owned by Airveteran Jukka Hemiila
N62CC c/n 13798 coded X5 named '*Virginia Ann*' owned by Mission Boston D-Day LLC
N341A c/n 2145 red and blue cheatline owned by Aerotechnics Aviation.
The ten aircraft that failed to come to Duxford were; N28AA, N29TN, N41CQ, N341A N472AF, N836M, PH-PBA, RA-5738, RA-2944G and the BBMF Dakota ZA947.



Daks over Duxford; Top Left; JM Air painted their DC-3 in the wonderful Civil Air Transport colours and matching registration which it carried when it operated for that airline in China in the 1940s and early 1950s. It is seen here taxiing in after landing, having just arrived for the Daks over Normandy event. Top Right; Carrying code Number: 268830/CU-R, this Douglas C-53D from the Commemorative Air Force also flew in for Daks over Duxford. Bottom Left; The Lisunov Li-2 is the Russian licensed version of the successful American Douglas DC-3 aircraft. The DC-3 took off for the first time on 17th December 1935. The Soviet Union got the license in 1936. Malév used Li-2s post-war until 1964. HA-LIX was restored to flying condition in 2002.

News for June 2019 - by David Kennedy



Further to previous report, Spitfire T.IX (referred to in some sources as a Tr.9) G-CTIX, painted as PT462 SW-A, (photo left) did NOT make a deliberate gear-up landing when it arrived at Denham inbound from Duxford on an Aircraft Restoration Company (ARCo) flight, on 27th February, 2019. The occupants were uninjured but the plane sustained some damage and was transported by road back to Duxford. The undercarriage did indeed collapse on touchdown; I wonder if the engine was shock-loaded in the crash? As there was a fare-paying passenger aboard it seems they wanted as little publicity as possible. I've not seen any

published photographs. The Spitfire was dismantled and taken back to Duxford the very next day. So, the Chinook I saw heading in the direction of Denham was indeed co-incidental and not tasked with its recovery!

PT462 was part of a batch ordered on 17th July 1943 and built at Castle Bromwich as an HF IXe and powered by a Merlin 70. It was delivered to 39 MU at Colerne, on 21st July 1944 but moved to 215 M.U. at Dumfries, on 31st July for shipping overseas. Aboard the Silver Sandal on 9th August it arrived at the Mediterranean Allied Air Force on 23rd August. It is next noted as being issued to No.4 Squadron, SAAF on 19th November, coded "KJ-Z", and was based initially at Bellaria, on the Adriatic coast before moving to Forli in December. Returned to the RAF on 5th January 1945 it may have seen further service in the hands of both 73 and 326 Sqns but by April 1945 it was being operated by 253 Sqn and coded "SW-A". The Sqn spent time in Yugoslavia, Italy and Austria before disbanding on 16th May 1947. PT462 was stored at Treviso before being sold to the Italian Air Force on 26th June 1947, as MM4100 with 5 Stormo based at Orio al Serio, near Bergamo, east of Milan. It was later sold to the Israeli Air Force as 20-67 and served with 105 Sqn at Ramat David Air Force Base. The Israelis retired their last 16 remaining Spitfires in 1956 and 20-67 was ferried to IAI Lod for storage bearing the civilian registration 4X-FOM.

The IAF later donated a number of Spitfire airframes to various Kibbutz for display and 20-67 was given to Kibbutz Kfar-Gaza. In 1976 the now derelict airframe was discovered with its faded 4 Sqn markings of "KJ-Z" showing through its dilapidated paintwork. After a number of years further remains of the Spitfire were found buried at the municipal rubbish dump, returned to the UK for restoration, and extra work was carried out to make it in to a two-seater.

Heron in Hard Times. April's ABN also had a report from Santa Cruz de la Sierra in Bolivia. It seems a DH Heron C. Mk.4 registered N82D (*photo right*) suffered in-flight damage to both starboard engines and made an emergency landing there. A report says the landing was in November 2014 but the plane remains there with a damaged rudder visible. Construction number 14130 was delivered new to the Queen's Flight, RAF on 16th April 1958. It was transferred to No 60 Squadron RAF on 3rd Feb 1969 (replacing a Vickers Valetta believed still in storage Cosford reserve collection) – both were named Lorelei. (*Lorelei is a feminine name taken from the name of a rock headland on the Rhine River. Legends say that a maiden named the Lorelei lives on the rock and lures fishermen to their death with her song!*) The always immaculate airliner was then transferred to the Royal Navy in 17 July 1972 and it served as a VIP transport until withdrawal Dec 1989 then being stored at Yeovilton. Registered as G-BVBI from July 1993 it was sold to the USA as N82D (R&R Holdings), 29 August 1995. It may have kept its RN colour scheme but it is rather a shame we let it escape preservation in view of its military heritage in my opinion –DK.



“There’s an Airbus at the bottom of my garden” could well have been the headline for this image released in late April. Paul & Janet Marchant own a house that backs on to Southend Airport. Recently a disused taxiway was brought back into service and as a result an easyJet aircraft is clearly visible some 150ft from her garden fence. Parked lightplanes are right up by the fence. I noticed a rotary clothesline which presumably gets a blast of hot air as departing jetliners manoeuvre into position. They grumble that with departures every 20 minutes conversation becomes impossible. I think they should rent the property to plane spotters! I’d loved to have had such

a view but would have preferred the era of piston & turboprop types rather than modern jets. The airport, owned by the Eddie Stobart Group are seemingly looking at ways of easing the neighbour’s discomfort (blast fences might help). The couple moved in to their home 7 years ago and presumably had no idea their home was next to an airport. They should have gone to Specsavers!

World War 2 related stuff. The Luftwaffe’s latest strike. BBC and other media reported that on Thursday 23rd May, this year, an unexploded bomb, believed by experts to be a SC250 (Sprengbombe Cylindrisch 250), (550lbs) dropped by a passing German bomber, was unearthed on a building site in Kingston-Upon-Thames. Presumably the target was the Hawker works. Around 1,500 residents were evacuated including Kingston University people, a cordon was set up as an Army team set to work. Often the device would be gingerly dug out and relocated to a remote site (including a bomb found earlier this year next to Docklands Airport), and detonated. This time, however someone felt packing it with tons of sand prior to a controlled explosion would suffice. I’ve seen photos of the unexploded device and of the Army guys posing in the resultant, large crater. However, collateral damage was considerable, cars were wrecked and house windows blown in, the bang was apparently audible eight miles away. Police say damage was limited to 50-yards from the detonation. Insurance claims may prove interesting but there was plenty of evidence reported. The newspaper said that in WW2 the Germans dropped 24,000 tons of high explosive on London in 85 major raids, (presumably that does not include V1 & V2 weapons later in the war). Co-incidentally the day I read the newspaper report was the second occasion this bank holiday that the 1969 film *The Battle of Britain* was on TV. I watched it on the Monday with a bottle of Sainsbury’s Taste the Difference Traditional Kentish Ale to hand, it’s brewed by Shepherd Neame whose main brand is Spitfire!

Talking of that illustrious warbird, the same day's Daily Mail reported on an incident which occurred near Biggin Hill on September 29 last year. The report has just been released; a Spitfire had just performed a victory role when a PA-28b light plane appeared close-by. A passenger in the PA-28b said the warplane filled their windscreen and every rivet was visible as it flew past. The UK Airprox Board concluded that the Spitfire pilot's actions were "ill-advised" to the extent "safety had been reduced below the norm".

D-DAY – 75th Anniversary Events. OK so this could so very much fill the rest of this magazine, very easily but unless you are a blind hermit up a mountain, then I guess you will have witnessed it all on television & in press. The memories of those that took part – all in their nineties now (with one-quoted guest who was 101) were enough to bring tears to the eyes at times. I found it hard not to think of some of our former members who were in the forces at that time. And also, some we met in later life such as Maxwell Chivers, landlord of the Swallow pub in Hillingdon. A Lancaster crewman he was –despite a pub adorned with RAF paintings, most reluctant to ever speak to our Society. We eventually got him for a 'half the evening chat' but I suspect with questions & answers, it could have well gone on and on. For those who never met him he once was in a Lancaster (as an observer-gunner methinks), shot-up on a long-range mission and thus ditched in the Mediterranean Sea (thus earning him a 'Goldfish' badge), probably lesser known than the Caterpillar badge awarded to those that 'hit the silk' in an emergency. (By the way I believe Denham firm Martin Baker still issue them to this day –their own test-pilots do not qualify as it is their job to test such seats!) Max also told us of an occasion when their navigator, a veteran of perhaps half a tour suddenly broke down and sat cowering under his nav-table during a mission.

In 2019 Post Trauma Stress Disorder, (PTSD); is a recognised condition and I sincerely hope is well looked after. In WW1 it was termed shell shock and in the next conflict sometimes 'lack of moral fibre'. My personal attitude – don't criticise if you've not been there. I am wrong age to have known front line or even National Service –Lucky me! A new version of the classic anti-war novel Catch 22 will be out by the time you read this. An item I saw says only two real B-25 Mitchells will be needed (CGI providing more presumably?) Not like the Hollywood film of decades ago when a phalanx of these medium bombers assembled.



Across the media there was much coverage of the 75th anniversary of D-day, and rightly so. Many films were screened on numerous channels (though Dunkirk & the Charge of the Light Brigade were somewhat questionable). I saw a fragment of COLOUR film showing Hamilcars (*photo left*) and a Horsa being towed towards France, slightly out of focus in the background were the towing aeroplanes –Stirlings. More colour film was taken by American troops as they reached the beach on that fateful day. Many veterans interviewed in many different programmes stressed that they were not heroes, only that they were lucky. I saw one documentary where a man who was parachuted-in the night before, to set up a Rebecca-Eureka radio-link to guide in fellow servicemen spoke of his role. He would be captured and spent the rest of the war in captivity.

A German was also interviewed, the rest of his unit were killed in the fighting but he survived –again as a PoW. Dubbed the 'Flying Angels' a woman who served aboard ambulance planes which ferried the badly wounded to the UK from the Normandy bridgehead was also in the documentary, largely unremembered they did their bit and for many their care was the last comfort a dying serviceman would have had.

I was also impressed by 'Guy Martin's D-Day Landing' screened in early June. This man is a motorcycle racing champion but is in many ways the heir to steeplejack Fred Dibnah in being obsessed with British engineering. For this 2-part documentary he planned to fly to Normandy and jump from a genuine D-Day Dakota, which sadly was not ready in time because its restorers refused to cut corners to speed up the task. So, he jumped successfully from another example. It was quite amusing (in the Editor's opinion) that the French official there to ensure passport & customs duties were carried out had swanned off by the time Guy landed, in authentic battledress; thus he was able to claim that, as the men did 75 years ago, he had 'officially invaded' France!

On and around 6th June, the Daily Mail produced some facsimile copies of period newspapers. I was reading 'Typhoon Pilot' - the story of an ace RNZAF fighter pilot and the 'weapon' he flew in. Desmond Scott DSO, OBE, DFC & Bar being the author. He described the frequency of losing Squadron mates as they fought their low-level form of warfare. He described D-Day thus. "like homing seabirds, many aircraft accompanied me back across the Channel. At various distances were lone Spitfires, and here and there a lumbering four-engined bomber, ragged packs of Typhoons, Mustangs and Thunderbolts, all heading for the peace and security of their home bases on the South Coast of England. For us it was the end of D-Day; for many it had been the end of a lifetime. Tomorrow would be D-Day +1, and for our pilots more targets for interdiction".

In passing the decision to name the Eurofighter which equips the RAF & present day Luftwaffe, the Typhoon II was the subject of much debate. Many Germans perished under the cannon and rocket attacks inflicted by the Hawker Typhoon and some felt it was rather heartless to recollect that name for the supersonic jet. Nevertheless, Eurofighter Typhoon was used. I had to laugh as in a review of UK holiday destinations the writer said "Children will love the giant model Hawker Typhoon jet." The D-Day era Typhoons had a massive Napier Sabre piston engine driving a 3 or 4-bladed prop. The Typhoon had a difficult life, intended as a Hurricane replacement, its performance at height was woeful but it proved a great bludgeon the ground-attack role. An alarming tendency to lose the entire tail assembly claimed a few pilots necessitating strengthening of the airframe. Typhoons wore black & white stripes well ahead of D-day, under the wings. Some had been mistaken for enemy Fw190's and shot down, so this was an effort to make them recognisable for trigger-happy flak gunners. A previous idea to paint the planes noses white was deemed very unpopular with the pilots and was soon abandoned.

ARMISTICE AIR POWER – A Correction to the Third Part of my article in the May & June 2019; It suggested on Page 14 that I would be concluding the list of Squadrons created in WW1, and then be covering WW2 Squadrons in the next part, however I DON'T intend to cover them at all! (DK).



Local' News. I read that Jack's Fish & Chips opposite the former RAF Uxbridge has been renamed Churchill's presumably as a draw to visitors of the revamped bunker site. As the Green Man I twice visited it (being refused service the first occasion as time had rung in the afternoon; the smoke-filled bar was still full of drinkers and I suspect that if I had been a 'known face' then I'd have got served). In any case I visited some years later before it closed down. The Green Man is mentioned by T.E. Lawrence as a watering hole in his autobiography 'The Mint' when he was at RAF Uxbridge under an assumed name. Also, in D-Day week I popped into the Orchard pub in Ruislip. There is new signage by their Spitfire model, one lot in English and one in Polish depicting the time Poles flew from Northolt in defence of the UK.

Also, of regret is that The Bell in Ruislip Gardens is now an Indian restaurant & bar (handpumps removed). My first visit to this somewhat odd pub was decades ago and my guide pointed out a very elderly lady who was enjoying a port & lemon. I was told she had been visiting daily since the place opened, back in the 1930s. In more recent times the 'guvnor' had two large black Alsatians that would head your way as soon as you walked in, but he would immediately call them back from the stool he sat on – a bit unnerving that. He was looking forward to the pub being demolished when HS2 is bulldozed through but never lived to reap the financial compensation. His widow added rooms to let and the Bell became The Bell Inn, it is now renamed and presumably under new ownership.

It's super going supersonic - by Keith Cameron



With a journey planned to South Africa, a sterling/ Rand exchange rate improving by the day and some knowledge of Thunder City's military jets operations, I had to investigate the potential for a flight. Mike Beachy Head, (*shown left*) the owner of Thunder City, had been captivated by the prospect of operating ex-military jets. He based Thunder City at Cape Town International Airport and, at its peak, there were three English Electric Lightnings, three Blackburn Buccaneers, seven Hawker Hunters, a Gloster Javelin and others. Only a small selection of these aircraft were airworthy. Although Mike Beachy Head was a successful businessman and owned a number of distribution companies, the aircraft at Thunder City had to work for their living. Air Shows, flying as targets for military pilots and 'pleasure' flying produced the income.

Flights could be bought on the Lightning, the Buccaneer and the Hunter. The Lightning was frighteningly expensive and if you sneezed you would have missed half of your flight time. The Buccaneer has always been rated as an exciting aircraft by pilots but, seated in a tandem cockpit, the second man had no flying controls. So, it had to be the Hunter. It was a good choice. The almost supersonic Hunter was a classic with beautiful lines – even as a two-seater and an excellent record. Despite a few teething problems with the Aden cannon and the airbrake arrangement plus the Avon versus Sapphire issue, it soon matured into a reliable and popular aircraft, serving the RAF for 43 years. 1,975 Hunters were produced and seventeen foreign air forces operated them. The Hunter selected for my flight was a T8 which was the naval version of the two-seater trainer. But before the flight there were several preliminaries organised in an understandable order. First was payment for the forthcoming pleasure. Second was a briefing about the aircraft, mainly about its operational limits, idiosyncrasies and the cockpit layout and, finally, the safety brief which included emergency procedures and 'How to Eject.' The ejector seat operations and disciplines were covered so thoroughly (including a practice ejection from the static ejector seat in the Briefing Room) that I wondered whether they expected it to happen.

An hour after walking through the front door it was time to say hello to ZU-ATH and to ex-Air Vice Marshal 'Boz' Robinson who was going to be the boss in the cockpit. Very kindly, Boz (who had just ferried another Hunter from Europe to Thunder City) told me that as I was a pilot, I could take the left-hand seat. He was tapped on the shoulder and was informed that insurance conditions meant that I would not be sitting in the left-hand seat. Eager for me to have a good time, he then whispered that once we'd taken off, I could have control and do most of the flying. And, of course, we would "do the big one" – go through the sound barrier. We walked out to the all-black T8, climbed up the ladders and settled into our seats. There was a hospitable amount of space in the cockpit with the seats being reasonably comfortable. Not wearing G suits probably helped. Only flying overalls were needed for this particular sortie although oxygen was a necessity. Somebody interviewed in a book about Hunters had said that the cockpit layout of the switches and gauges had been 'carefully thought out'. To me it looked as though a designer with a grudge had thrown the dials and switches at the instrument panel and they had been fitted where they landed. The Blind Flying Panel was clearly delineated by a solid white line the size of road markings. So, there was no problem recognising the Sacred Six instruments but the rest. Strapped in, the oxygen supply was connected and was checked by Boz, "Is it winking and blinking?" was the test question, referring to the dolls-eye oxygen flow meter. The Hunter's cartridge starter had been replaced by conventional electric ignition, so no bangs just a healthy whirring of fan blades as the 'small' Avon took up the challenge and we completed the cockpit checks. The Navy had opted for the smaller engine for reasons of cost. The T8 had initially been fitted with a single Aden cannon which was subsequently removed by the Fleet Air Arm and the naval radios and the airfield arrester hook had been removed when the Hunter moved from the military list to the civil register. Brakes and the remaining instruments were checked while taxiing to the threshold of Rwy 01. ZU-ATH was held on the brakes until the Avon had spooled up and then we launched forward, gobbling up runway and lifting off at 140kts.



It didn't take long to leave Cape Town Airport's ATZ and on the climb out Boz effected some gentle checking manoeuvres before announcing that an aileron roll was next on the list. He spun the Hunter 360 degrees on its axis taking less than three seconds. "Now you try," he said. Luckily, I had watched how he did it, so I mimicked his actions. So, at speed, stick snapped fully over to the left, immediately fully hard over to the right and centred. We finished about 10 degrees off level so the Artificial Horizon told me. Good job I'd been watching what he did. After some general handling we opted for 30,000 feet as our base for more aerobatics. Boz performed a couple of loops which seemed to take longer to execute than in a Chipmunk but at more than 300kts the manoeuvre is using up a lot of sky and the circles need to be large. I had a go at loops but I don't think they were airshow standard. Then Boz said it was time to experience some higher G force and in the Hunter that means 90 degrees of bank at full power with the airbrake extended. The tightness of the turn produced 4.5g. Two of those was enough.



Then 'the big one'. The Hunter's maximum speed in level flight is 727mph so we needed to go downhill to go through the sound barrier. Inside the aircraft, the experience was unremarkable. There was a build-up of a thin layer of white mist on the wings' leading edge which suddenly disappeared and the tail waggled as it was given a passing kick by the release of compressed air. There was no additional noise inside the aircraft – the recipients of the boom were herds of cattle some six miles below. That was enough high jinks for the day as the clock had beaten us. It was a speedy return to

Cape Town International where Boz requested a 'run and break'. "Negative", said the Tower. So, he did it anyway, re-defining the manoeuvre with an announcement, "ATH going around". With nothing else in the circuit, we flew the RAF oval circuit rather than civil rectangle and with 23 degrees of flap selected for Final, we touched down at 120kts. We taxied back to our apron where I was robbed of my Thunder City flight overalls and bonedome. I don't recall receiving one of those certificates which confirm details of your flight but I do have the most important confirmation – one hour from 10.30 to 11.30 in my logbook as P1/S, counter-signed by AVM Boz Robinson. Sadly, the Thunder City jet flying opportunities are no more. After the crash of one of its Lightnings the operation closed down. Eight years later in 2017, very sadly, Mike Beachy Head, pilot adventurer, died of a heart attack.

XL598's service history



Built by Hawker Aircraft Ltd at Kingston-upon-Thames, as a Hunter T.8 for the Royal Navy, XL598 took its first flight on 15th October 1958 flown by David Lockspeiser. It was handed over to the Fleet Air Arm on 1st December, entering Squadron service with 764 NAS (Naval Air Squadron) on 8th January 1959. Issued the identity '703' with an 'LM' shore code, XL598's early service life was 'interesting' to say the least! It was hit by a fuel bowser and tractor in separate incidents, and also ingested a Royal Navy beret through its intake! It was sent to RNAY Belfast for maintenance in

November 1960, and did not return to FAA service for two years. On 9th May 1962, the aeroplane was issued to 738 NAS at Lossiemouth, where it was operated as aircraft '632'. It moved with the Squadron to RNAS Brawdy in November 1963, and over the next two years was operated as aeroplane '632', '779' and lastly '775'. Following a period of maintenance at 5MU (Maintenance Unit) Kemble (November 1965-June 1966), XL598 re-entered Fleet Air Arm service with 738NAS as '778' on 19th July 1966 and remained in use there for the next four years, suffering a bird and a lightning strike in the process. It was moved back to Kemble for maintenance in May 1970.

XL598 arrived at RNAS Yeovilton on 15th October 1971, where it joined the Air Direction Training Unit (ADTU) (run by Airwork Services Ltd) as '741' with a 'VL' shore code applied on the tail. On 1st December 1972 XL598 became a member of the newly formed Fleet Requirements and Air Direction Training Unit (FRADU) fleet, following the merger of the ADTU with the Fleet Requirements Unit (FRU).



It kept its '741' code for a short time before it was changed to '871'. For the next eleven years, XL598 was employed on military tasking, aside from periods of maintenance (March-September 1977) and re-finishes (November-December 1974 and November 1977-January 1978, when it emerged as aeroplane '870'), until 29th July 1983, when it was ferried to RAF Abingdon in preparation for a comprehensive overhaul.

On 22nd June 1984, XL598 returned to RNAS Yeovilton as one of the first Hunters to be painted in the new dark sea grey finish, that was to become standard across the fleet. The aeroplane was assigned the fleet number '880' and aside from two periods of maintenance with Lovaux at Hurn (February-December 1988, and January-December 1991) remained in use until it was retired from Fleet Air Arm service on 5th March 1993. It was placed in store at RNAS Yeovilton and used for essential spares until being placed up for disposal in November 1994.

Entered into the Sotheby's auction, XL598 was bought by Mike Beachyhead, and Following preparation work by Barry Pover it was ferried to Exeter Airport under the UK civilian registration G-BVWG. The aeroplane was bound for a new life in South Africa, and following further work carried out at Exeter, which included the removal of all its Fleet Air Arm markings XL598 was declared ready for its long ferry flight by air. Well known Hunter display pilot, Brian Henwood agreed to fly the aeroplane with Mike Beachyhead in the right-hand seat. On Wednesday 19th April 1995, XL598 took off from Exeter, and routing via Italy, Greece, Egypt, Ethiopia, Kenya and Malawi arrived at Cape Town a week later. The aeroplane was re-registered on the South African civilian register as ZU-ATH, and was later re-finished in representative Black Arrows colours and became one of the founder members of the famous Thunder City fleet. With the winding down of the Thunder City collection during 2011, ZU-ATH was offered for sale via bid auction that summer, but the closing date has since been extended to 31st January 2013. It is currently stored in a dismantled state, and would require an overhaul before it could be flown again.

(Credit <http://www.fradu-hunters.co.uk/fraduhnt/880xl598.html>)



Photos; Above on previous page, the all black ZU-ATH in South Africa as part of Thunder City. Next, the light silver grey and red scheme while XL598 was in the FAA as '870', Next an all grey scheme of XL598 with FRADU as '880' and the Hunter marked as G-BVWG on the ramp in South Africa after the delivery flight from the UK.

Air Travel to the Falklands 2018 - by Peter Fraenkel

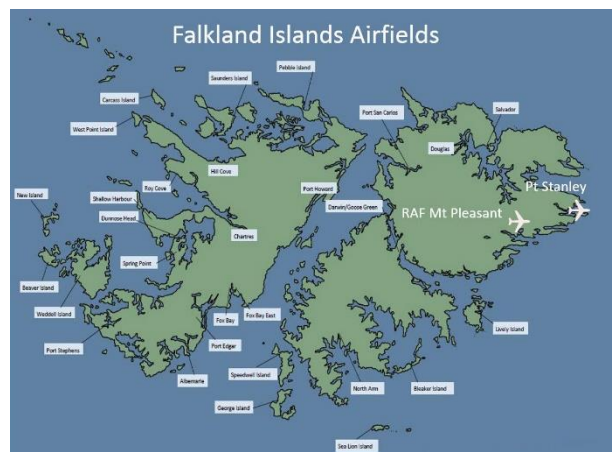


Last year my wife and I, took one of the world's longest over-water regular air routes, from the UK to the Falkland Islands. I used to visit the islands regularly back in the 1980s and 1990s as part of my work as a consulting engineer advising the Falklands Islands Development Corporation on energy issues. What follows gives a bit of an outline of aviation in the Falklands

In aviation circles, the Falklands is usually noted for the short war in April and May 1982 when the UK sent a task force which rescued the islands from the Argentinian invasion, largely thanks to a small but effective force of RN and RAF Harriers carried on HMS Invincible and HMS Hermes which were able to maintain air superiority most of the time over the islands. In fact, the islands are one of the UK's most distant dependencies deep in the South Atlantic with a civil population of about 3,400 and a military garrison said to be around 1,000, on two main islands with a combined land area similar to that of Wales. The islands are located about 300 miles off the Argentinian coast and about 8,000 miles from the UK. The capital is Port Stanley, population around 2,000. In 1982 the only hard runway in the islands at Port Stanley was too short for most jet aircraft although the Lockheed C130 Hercules could use it. This made it

difficult for the UK to defend the islands from the Argentine invasion, but soon after the war, The UK government "closed the stable door" by building a major military airport about 35 miles SW of Port Stanley named RAF Mount Pleasant. This was completed in 1985, and has one of the longest runways in the South American region. Since then RAF fighter aircraft have been based there to defend the islands, of which more later.

There was no way to fly to the Falklands from Europe before the 1982 war and there are only two ways to fly to the islands today, direct from the UK, usually refuelling at Ascension Island in mid-Atlantic, or from Chile. Immediately after the 1982 conflict the RAF operated Hercules aircraft between Ascension Island in the middle of the Atlantic and Port Stanley. Ascension is still the preferred refuelling point on the 8,000 miles journey from the UK. Ascension Island was occupied by the Royal Navy from about 1815, and has an airfield, RAF Wide Awake, which was originally built by the Americans as a staging post during the Second World War and to this day is shared between the USAF and the RAF. Both RAF and USAF personnel are based there.



The Hercules used to supply Port Stanley from Ascension, immediately after the conflict with Argentina, and had to be refuelled in flight usually from Victor tankers, so this was an expensive and complicated operation. For a while, soon after Mount Pleasant was opened, British Airways briefly operated a service from the UK using Boeing 747s, but low load factors serving a destination with a total population of about 5,000 (including military personnel) caused them to discontinue this service. The RAF then took it over using Lockheed L1011 Tristars, based at RAF Brize Norton, which flew twice a week via Ascension Island to Mount Pleasant.



In recent years this service has been delegated to AirTanker, a PFP company that provides the RAF with transport and flight refuelling services, and is also based at Brize Norton, using Airbus A330 Voyagers for the service. The service is today known as The Falklands Airbridge. The Voyager is a military version of the airbus A330-200 powered by twin RR Trents. Of the 14 ordered for the RAF, four are operated as civil aircraft by Air Tanker, a company that provides services specifically for the RAF and is owned 40% by Airbus, 20% by Rolls Royce and split three ways between Cobham flight

refuelling, Babcock International and Thales. It uses civilian crews and is based at RAF Brize Norton where the RAF Voyagers are also mostly based.

The Air Tanker and RAF Voyagers are painted with similar light grey finish but the AT ones carry civil registrations while the RAF ones have discreet roundels and RAF serial numbers. The only regular air connection to the Falklands other than the Airbridge is from Santiago in Chile via Punta Arenas in southern Chile. Argentina is still hostile to the Falklands and does not allow any regular civil air connection to the islands although occasional charter flights have flown in from there and cruise liners regularly call at the Falklands having departed from Argentina. The Airbridge is open to civilian travellers although its main function is to carry armed forces personnel between the UK and the Falklands. Flights depart from RAF Brize Norton and head SW taking 18 hours in total. Aircraft refuel at Ascension after covering 4,195 mls in about 8 hrs and continue to RAF Mount Pleasant, another 3,922 mls in around another 8 hrs. Ascension is a vital link to the Falklands, being a small island, just a volcanic peak, emerging in mid-Atlantic. This offers a welcome refuelling stop for both aircraft and personnel. RAF transports normally do not carry alcoholic drinks so there is, or at least there was, a much-used cold lager dispensing machine in the waiting area on Ascension.



The Falklands Islands have relied on internal or domestic air travel for many decades, well before the 1982 conflict, because until recently there were virtually no roads. Although the Islands have two hard surfaced runways, a long one at Mt Pleasant and a shorter one at Stanley, most of the rural settlements in the Falklands are on the coast and have a jetty or some possibility to receive and deliver cargo items to and from coastal vessels they are not often connected by road. However, virtually every settlement has a grass landing strip which is usually carefully maintained and generally is equipped with a small shed which houses a large fire-extinguisher, often on a trailer, usually towable by the

ubiquitous Land Rovers used all over the islands. There is also always a dayglow orange wind sock.

These air strips are served by FIGAS – the Falkland Islands Government Air Service – which has operated since 1948 and today has five Britten Norman Islanders which have seen many decades of service. One of these has radar in the nose and operates as a maritime patrol aircraft used for policing the huge fishing zone around the islands.

FIGAS originally used two or three Auster light aircraft and a Noorduyn Norseman. Two of these were reconfigured as floatplanes and in 1953 these were replaced with purpose designed de Havilland Canada DHC-2 Beaver floatplanes. In those days there were few airstrips on land so float planes were used as they could land immediately offshore any settlement, weather permitting. Apart from FIGAS, Bristow Helicopters have long been active in the Falklands both for transport and search and rescue. The RAF also has helicopters, notably Chinooks, based at Mt Pleasant. No discussion of aviation in the FK can be complete without disobeying Basil Faulty and mentioning the war. To this day remnants of the aerial war remain although most wreckage has by now been removed. I remember staying at Pebble Island in 1987, not many years after the war, and the rubbish tip there contained the engines and tangled remains of several Argentinian Pucara turboprop strike aircraft which had been blown up one dark night by British Special Forces, who came and went silently in rubber boats.





When Mount Pleasant opened, four McDonnell Douglas Phantom FGR.2, arrived on 21st April 1986 to deter any further possibility of invasion from Argentina. These were initially part of 23 Squadron RAF but this was eventually renamed as 1435 Flight in 1988. The Phantoms were replaced by four Panavia Tornado F3 in July 1992. In September 2009, the Falkland's air-defence capability was enhanced when the Tornados were replaced by four Eurofighter Typhoon FGR4 which remain in service to this day. Boeing Chinook HC1s and Westland Sea King HAR3 were also introduced during the 1980s. Hercules were used up until April 2018 when the first Airbus A400M Atlas C1 arrived.

The air defence of the Falkland Islands is provided by 1435 Flight RAF, which originated in Malta in December 1941 as 1435 (Night Fighter) Flight (later the Malta Night Fighter Unit) equipped with Hawker Hurricanes. Rather cheekily for the RAF, the aircraft of the current 1435 Flight have carried individual identity letters F, H, C to represent the names Faith, Hope and Charity, and the fourth aircraft carries D for Desperation and used as a back-up aircraft. The aircraft also carry a Maltese Cross on their tails which may legitimately be claimed, but this Flight, had absolutely nothing to do with the three famous Gloster Sea Gladiators belonging to the Fleet Air Arm, named Faith, Hope and Charity which defended Malta heroically for a short while, a mere 18 months before 1435 Flight even came in to being!

Photos – Copyright the author except where indicated.

Photo captions, shown in the article top to bottom;

- 1) *The route from the UK to Falklands*
- 2) *Falkland Islands airfields & airstrips*
- 3) *Lockheed Tristar, landed at Mt Pleasant 1987*
- 4) *Air Tanker Airbus A330 Voyager refuelling at Ascension 2018*
- 5) *The author standing by a FIGAS Islander*
- 6) *Bristow Sikorski S61 in 1987 collecting passengers from Chartres, West Falkland*
- 7) *Pebble Island in 1987; the remains of various aircraft including Argentine Pucarars destroyed by the SBS / SAS*
- 8) *Below left; Phantom FGR 2 of 1435 Flight escorting a Tristar carrying the outgoing governor (and the author): note that this aircraft is H for Hope. The Falklands coat of arms is visible below the cockpit and the Maltese Cross denoting the 'ancestry' of this flight is on the fin.*
- 9) *Below right; Two Tornados H Hope and F Faith overflying Stanley in 2007 (Crown Copyright)*



Alan Streeter; My time with Surrey Flying Services – by Lawrence Hayward



In the 1990s, while researching the history of Christchurch Airfield, I was lucky enough to record the early career of Alan Streeter from Christchurch, then in his mid-90s, of his time as a wing walker and Licenced Aeronautical Engineer with Surrey Flying Services, from 1926. (*Photo Left; Alan is standing far right in leather coat*). His words are reproduced below, and consist of as much as he could remember from just under 70 years previously! Strangely I offered this account to the Croydon Airport Society but my letter received no response! Anyway, before Alan's account, in his own words it's worth setting the scene of a time after the First World War when aeroplanes were rare and most people

living away from the few airports that existed, still came out of their houses if they heard one approach.

After the First World War ended, the RAF was reduced to fraction of its former size and hundreds of pilots were demobbed. For some of these men, life as a civilian could not compare with the excitement of wartime flying and many looked to aviation as a way of earning a living. When civil aviation resumed in 1919 a few enterprising pilots soon started offering joy-rides and stunt flying to the general public for which flying was a complete novelty. In addition, thousands of aircraft were suddenly 'surplus to requirements' and could be bought at knockdown prices, for anything between £75 and £250, from firms such as the Aircraft Disposal Company Ltd (ADC), at Croydon. One aircraft type which found favour with post-war pilots was the Avro 504K which was easy to fly and had a low landing speed of only 45 mph, making it ideal to operate out of small fields. They could easily be adapted to carry passengers in the rear cockpit and the rotary engines, which powered these machines, were cheap and easy to obtain, as were the necessary spare parts. As a result, by the mid-1920s, dozens of Avro 504Ks were being operated up and down the country by joy-riding firms.

One such joy riding firm was Surrey Flying Services Ltd, founded by Captain A F Muir and Mr W J Grant at Croydon Aerodrome in 1919. With just a few Avro aircraft, this Company carried hundreds of passengers on joy-riding flights during the 1920s and 1930s. Their aircraft were painted in distinctive all blue paint schemes complete with 'Surrey Flying Services Croydon Aerodrome' in white letters on the fuselage, and they soon became well known throughout the UK. Each 'season' their aircraft were sent with support teams, to towns and cities all over the country to do joy riding and flying displays. In most cases, they stayed for about a week to ten days in each of the towns they visited. In 1926 it was the turn of Christchurch to get a visit



(Alan's home town) and posters and leaflets appeared in the local area, advertising '*Flying at Christchurch, Mudeford Lane, Mudeford*' on behalf of Surrey Flying Services Ltd. The visit started on Saturday 26th June 1926, when Captain E.F. Smith, landed in one of their Avro aircraft at Mudeford. The site used for the event on Burry's Farm, had previously been used for pony races and was sometimes referred to as the 'Old Race Course'. Perhaps by accident or design, the same site became Christchurch airfield, which would last for forty years in to the jet age! Typical of these events, crowds flocked to see the Avro aircraft (without paying!) but many people took the opportunity to have their first flight, costing from 5/- a head, depending on the duration of the trip. Most flights consisted of a quick take off, a circuit and landing, lasting no more than five minutes. According to the *Christchurch Times*, Surrey Flying Services carried over 1,000 people on flights over the town, during their visit, with many going up a second time.



From these flights alone, Surrey Flying Services would have taken a minimum of £250 for their stay; not a bad return considering that Walter Burry, the farm owner, probably received only £10 for the use of his field! Of the four Avro aircraft used by Surrey Flying Services during the summer of 1926, three were Avro 536 aircraft; G-EAKM, G-EAKP, and G-EBOF. These aircraft were converted from Avro 504Ks, to a design issued by A.V. Roe & Co in 1919, allowing four passengers to be carried, in a widened fuselage and more profitable than a 'standard' Avro 504K.

In the early post-war years, there was little regulation of joy-riding Companies. However, by 1926, the Air Ministry insisted on licensing sites used for these events and the visit to Mudeford would have been no exception. For a Licence to be granted the site had to be free from obstructions and away from built-up areas. The presence of a Licensed Aeronautical Engineer was also required to ensure that the aircraft were kept in good order. As the number of employees was always kept to a minimum to keep costs down, many employees had several roles, such as Licenced Aeronautical Engineer, wing-walker and parachutist being the job of one person! They also hired several 'assistants' from the local area, to assist with odd jobs, such as refuelling the aircraft and helping passengers get into the back seats of the Avro. One of those who got a job was on offer was Alan Streeter, a Coastguard's son who was born in 1904 in the Coastguard Station at Mudeford. Not long afterwards, his father was transferred to the Coastguard Lighthouse Station at Hurst Castle overlooking the Isle of Wight. Unusually Alan had to go to school by boat whatever the weather, and left school at age fourteen in 1918 just when men were coming back from the Western Front looking for work. As Alan Streeter explained;



'Little did I realise that this event would have such a profound influence on my life. In the 1920s jobs were not easily obtained and on hearing from our next-door neighbour, Mr Todd, that there was a job going with Surrey Flying Services and that Captain Smith was staying with Mr & Mrs Jobling who I knew well, I got an interview and a job! The job as one of several assistants hired at the time, involved filling the aircraft with petrol and oil; the petrol had to be filtered through chamois leather. Steps also had to be placed to one side of the aircraft for the passengers and we all vied with each other to help attractive young ladies aboard the Avro, and strap them in, which was one of the best 'perks' of the job. At the end of the visit, I must have suited, as I was taken to Croydon. The entrance to Croydon airfield was then

on Plough Lane. Surrey Flying Services workshop and office was in a large Nissen hut type building. After a short stay we were on our way to Great Yarmouth, where we did very well, business wise. For our time in Yarmouth there was no accommodation for the men and I slept in a bell tent with full tins of petrol which I used to keep the tent flaps down! These tins would crackle and pop during the night with the temperature change. The good thing, with where we were staying, was being able to slip on our bathing costume and be in the sea in seconds; the water was very salty but refreshing. It was a good life! The next year at Great Yarmouth I remember an Avro aircraft coming in to land and as the wheels touched the ground both wheels dropped off but luckily the aircraft carried along on its skids and stayed upright and all was well. While on tour with Surrey Flying Services, I saved every penny I got in wages and on arrival at Croydon, I placed my coat on a peg on the Nissen hut door and when putting my coat back on in the evening I found someone had taken the money! I took this up with Mr Grant who had his suspicions but could not prove it and this really upset me. I had noticed the person who I thought was guilty of this, and found that they were missing from the employees later in the season.





Surrey Flying Services consisted of Mr Grant and Captain Muir as partners. Captain Muir was also the stunt pilot. Very good he was too but on tour in Wales, he got a little too good and tried to do a full roll (at low altitude) and hit the ground with his wingtip; the machine was a right-off but he only got a damaged ankle and of course was shaken up. In the workshop there was Stan Fleetwood, Dicky Platt, and another ex-air force fitter, whose name I have forgotten (after all these years). Stan Fleetwood was the best rigger I have ever known as he didn't need Glinos (sic) or straight edges, but used his eyes. Jack Anderson was the engineer in charge of the stunt machines. Another person I remember was Basil Powell who nearly always teamed up with Captain Smith. It was due to Basil Powell that I took up wing walking. He

admitted to me that he was getting very nervous but 'put me through the ropes' with the aircraft on the ground. After a time period of instruction from Basil Powell, and talks with Mr Grant it was agreed I'd do wing walking, and he (Basil) did not do anymore, (whereas) I really enjoyed doing it. Basil Powell later worked for the Air Registration Board.

On year, while we were away (on tour) all the equipment was removed from Plough Lane and transferred to a new hangar in the Purley Way (Croydon). This did not improve matters for although there was hot air heating it never worked. There was a boiler house but no finances to cover the cost! It was during this time that Freddy La Croix joined the company. He was an engineer. I don't know how it came about but I learned that it was advertised for someone to do a parachute drop. A woman, I think her name was Mrs Pierce, applied and it was Freddie's job to see her over the side (rather than the pilot); this he did but was horrified to see her drop and be killed. Freddie walked the floor of his bedroom all night.

We had a 20-cwt covered van. It carried spares and when on the way to Devon, we came across a hill and no way would the van travel up it, so we had to go up in reverse. On the side of the van was (the words) Surrey Flying Services 'We fly why don't you? A car travelling down the hill with several people in it stopped. They wanted to know if our aircraft also flew in reverse! What a let-down.

We had a DH9 aircraft which was flown by Captain Muir on photography work. This required a new engine and Freddie La Croix and I were given the job of collecting one from ADC, plus some spares for the Clerget engines. All went well so Freddie decided he would go back again for a further shipment and we got it to our hangar and was just going to unload when we were rumbled (by the management) and had to take it all back. It was our own fault sadly. (Presumably Surrey Flying Services could not afford to pay for these extra spares.)

We had a pilot whose name was Lawson. He was a right one who liked nights (on the town). I had several cross-country trips with him and he frightened me to death. He would put himself on course, settle down and go to sleep. As he dropped off to sleep so the nose would go down and down and he would wake with a start, level up and go to sleep again. Twice when the nose got so low, I had to wake him!

I had one trip in an Avro 504K to Scotland with Captain Handcock for the opening of the aerodrome (location unknown) which entailed several fill ups with petrol and oil but still managed to get there. I think our presence (was) to increase the number of aircraft on display. The trip back was not so good; the weather was bad, and when you have maps to guide you (in thick cloud), it can be very unsettling. We came down as low as possible and we found we were out to sea. We climbed and later landed in a stubble field on top of a cliff. We chocked the machine and were having a look around when a couple of blokes came to see if we were OK, and finding that we were, took us down to their beach hut and gave us breakfast! We parted from them and took off and landed at Sherborne for fuel. Taking off from there we flew in to the worst electrical storm I've known and we both got very wet. When we landed back at Croydon the hangar was under two feet of water. Each year during the winter I overhauled and tested seven Clerget engines for the following summer. The life of an engine being (assessed as) 100 flying hours; the test bench being a Camel fuselage bolted to the ground. Even though I say it myself these engines easily completed the 100 hours as each item was weighted to keep the engine in balance.



Joy riding with Surrey Flying Services was gradually phased out and a flying school taking over with DH Gipsy Moths with a DH Puss Moth (G-ABHB) for flights. I remember running up the engine of the Puss Moth one morning, subject to a day's flying, when I heard a strange grating noise from the left side above the door. I took down the upholstery and found a member had cracked completely. The machine was taken to De Havilland and a complete restoration of roof members was carried out. Lucky me!

In April 1931, I went to Adastral House and sat an oral examination which lasted two and a half hours for my Ground Engineers Licence which I passed and was issued with Licence Number 1859. I was very pleased about this for I had done it off my own bat as the saying is. After this, things started to go wrong for I had a knock on the back of my left hand by a propeller; nothing much but blood poisoning set in, and to cap this, Basil Powell, asked me one day to give him a swing on the (starting handle) on the Ford. He must have had it on full ignition for no sooner had I started to crank, than I got a backfire which broke my right wrist. I was treated by a doctor in Bradford and later went to hospital in West Hartlepool, but the blood poisoning had travelled to the break. From Hartlepool I travelled home to Christchurch. I must have looked a wreck with both arms in slings. Boscombe Hospital did a good job for me once the poison was clear with a tablespoon of Epsom Salts a day. It was during this period I met my girlfriend Kathleen Wileax, the sister to my brother Leonard's wife. She later joined me at Croydon where we had a quiet wedding in 1933. She will tell you this time in Croydon was the best of her life.

I met Amy Johnson in rather a strange sort of way; she had at that time a Stinson with a Jacobs engine which she kept at Rollason's who had the next hangar. Every time she wanted to fly this machine it caught fire, she really got fed up so brought it to us and it fell to me to sort the trouble, I found by priming the engine, fuel was escaping from induction, so removed bottom pipes and found the flanges had broken, problem solved, and another satisfied customer. For the (MacRobertson) Australian Air Race, we had a bi-plane to assemble and fit long-range fuel tanks. This is when Stan Fleetwood was so good, he assembled and rigged this machine, and the whole work took the best part of two days and a night. It flew fine on test flight. Rollasons had the (Bellanca 28-70 EI-AAZ) 'The Irish Swoop' to service; they failed to get the engine to start, so I overhauled the magneto and carburettor, still without a cough. The whole position was cured when Capt. Bonas arrived on the scene. It seemed all the trouble was pressurising the fuel system by wobble hump. (However, despite being fixed it had to withdraw from the race).

Aviation Tours came into being for a season. A Handley Page W8 was being hired from Imperial Airways, with an Engineer, by Captain Fielden. He also hired an Avro 504K from Surrey Flying Services; he supplied the pilot whose name was Brunton. I was the engineer, we had a good season, Coventry, Burton on Trent, Northampton, Yeovil, Aberdeen, and Southport. This (visit to Southport) was on the sands and proved a disaster for we had high tides and strong winds which blew the Handley Page on to the Avro with repairs required to both aircraft. Surrey Flying Services had quite a number of aircraft and a DH Dragon included; this machine used for Army Co-op and IEC. It was owing to one of these jobs that I terminated my employment at approximately 00.00 hrs. It happened this way because the job that night was (scheduled to end) for 20.00 hrs. The pilot and passenger arrived (late) for take-off at 22.00 hrs after hotel closing hours. I'm afraid I blew my top. I told the pilot I would see him off but he would have to hangar the machine on his own. He rang Mr Grant, who kept me messing about, talking (and preventing me from leaving work) until the aircraft arrived back. My job was then terminated after 11 years. I was at that time the only Licenced Aeronautical Engineer and I was putting in hours and hours of work in overtime, without pay. I then walked over to Olley Air Services, and had a chat to Wally Bateman. He rang Capt. Olley and believe it or not I had a job by 00.30 hrs. Mr Grant called Capt. Olley in the morning to arrange that I work a weeks' notice as agreed.



Photos top of article to the bottom; A line up of Surrey Flying Services personnel, with Alan Streeter on the far right with leather coat. Second from the right may be Mr Grant. It seems the cutting of a ribbon may be the start of a season, and is the same occasion in the second photo, with the same people waving G-EBOF off but the location is unknown. Next; another photo of G-EBOF side view. Next; This bell tent was Alan's home for the season. Alan is second from the right. It seems it is an early start seeing as there are no leaves on the trees! Next; The result of a storm at Southport, as mentioned in the text. Next photo; Alan Streeter wing walking over what is thought to be Coventry. Next; A DH Puss Moth G-ABHB of Surrey Flying Services. Lastly; Alan Streeter and his wife Kathleen in the 90s overlooking the field in Christchurch where his career in aviation began in 1926, and now a school playing field. The couple retired to a house in Mudeford, which was also once beside the airfield when it was in use up to the 1960s! Sadly, I never recorded what Alan Streeter did after Olley Air Services but I understand he was involved in wartime and postwar aircraft production. He retired circa 1969.

Could Bomber Command have used only the DH Mosquito from 1942? – by Lawrence Hayward



Could Bomber Command have only used the DH Mosquito from 1942? On the face of it the statement might be true, as the Mosquito came in to its own during the mid-war period about the same time as the Lancaster and improved Halifax. The later marks of Mosquito could carry a 4,000-bomb load to Berlin whereas a USAAF B-17 could only carry about 3,500 lb of bombs to Berlin. The Lancaster could carry 6,000 lbs to Berlin, but with heavy bombers it was often the case that they took a 'dog's leg' route to the target to confuse the enemy meaning that more fuel was carried and much less of a bomb load.

Regarding the types of bombs carried, the Mosquito had a disadvantage in that they could only deliver their payload as either one bomb of 4,000 lbs or as four 500 lbs bombs. The Lancaster payload would allow for a much wider variation, so were more flexible. By using a combination of blast bombs and incendiaries Lancasters could blast the roofs off buildings and shower the same target with incendiaries to start major fires. An individual Mosquito could not do this but in hindsight that could have been sorted out by an airframe modification or flying the blast bomb carrying Mosquitos over the target first, closely followed by Mosquitos carrying incendiaries or using a mixed formation.

A major advantage of the Mosquito though was the survival rate of the aircraft and its crew, a compelling argument of speed over defence. From November 1943 to March 1944 Berlin was repeatedly bombed, the loss rate of the heavy bombers (predominantly Lancaster's) was 5.1%, but for the Mosquito it was just 0.5%. Put another way, in WW2 Lancasters flew over 150,000 sorties, and almost half of them were lost in action, together with over 21,000 airmen. The War Office statistician, Freeman Dyson investigated the high losses on RAF aircraft. He noted crews were less likely to survive bailing out in a Lancaster (15% chance) than a B-17 (50% chance) or the Halifax (25% chance). He suggested the very small escape hatch on the Lancaster might partly be to blame. He also argued for smaller crews. If losses were to be accepted the fewer airmen on the plane the better. To achieve this, he suggested removing the two Lancaster defensive gun positions (in the nose and upper fuselage). Not only would this reduce the crew size but would save enough weight and reduce drag and increase the Lancaster's speed by around 50 mph. All of which, in a roundabout way, makes aviation historians think why didn't they just build more two-man Mosquitos? It was fast, it had a decent bomb load (especially when comparing it to the American B-17) and could mostly out run enemy fighters.

It has been suggested that the Mosquito was more complicated to build than aircraft of metal framed stressed skin construction, compared to more traditional types. The fuselage was moulded in two halves, whereas with a stressed skin aircraft it's much easier to build and easier to train workers to do the job, especially women who were brought in to fill the gaps in the factory man power. However, women were also quite capable of making a Mosquito, and my own mother-in-law trained as a nanny pre-war, but by 1942 ended up as an inspector in De Havilland! Prior to joining DH, she had absolutely no engineering training whatsoever, which proves that if a person gets the correct training, they can build anything! In the event more Mosquitos were built than Lancasters, though a fair proportion were built as night fighters, fighter bombers, for Fighter Command, Coastal Command and 2 TAF. Therefore, making Mosquitos from wood was not a disadvantage and actually saved on other precious raw materials, and despite the need for specialist wood including birch and spruce from Canada and balsa from South America it was in far greater supply than aluminium. Also, when it came to production, parts and sub-assemblies could be broken down and made by underutilised furniture factories and workshops the length and breadth of the UK and further afield in other parts of British Commonwealth. This made it very difficult to interrupt production. The Mosquito only needed two Rolls-Royce Merlins compared to a heavy bomber that needed four, which was a major saving, that should not be ignored.

Another advantage of a two-man Mosquito was that only two 'trades' were required, that of Pilot and Navigator, and if Bomber Command used mostly Mosquitos, that would have greatly reduced the need for various Wireless and Gunnery School establishments. History has proved the two-man crew concept, as today's strike aircraft are mostly manned by no more than two; a Pilot and Navigator / weapons system controller, while Bomb Aimers, Flight Engineers, Air Gunners and W/Ops are no more.

Apart from its proved track record in night bombing and target marking, the Mosquito was also excellent for low level daylight precision raids such as that carried out on 30th January 1943, the 10th anniversary of the Nazis' seizure of power by the Mosquitos of Nos. 105 and 139 Squadrons. Their morning attack knocked out the main Berlin broadcasting station while Commander in Chief Reichsmarschall Hermann Göring was speaking, putting his speech off the air. A second sortie in the afternoon inconvenienced another speech, by Goebbels. Later, while lecturing to a group of German aircraft manufacturers, Göring said:

“In 1940 I could at least fly as far as Glasgow in most of my aircraft, but not now! It makes me furious when I see the Mosquito. I turn green and yellow with envy. The British, who can afford aluminium better than we can, knock together a beautiful wooden aircraft that every piano factory over there is building, and they give it a speed which they have now increased yet again. What do you make of that? There is nothing the British do not have. They have the geniuses and we have the nincompoops. After the war is over, I'm going to buy a British radio set – then at least I'll own something that has always worked.”

With the above in mind, the Mosquito could have also replaced a few other types in 2TAF such as the Boston and Mitchell, to name a few, that would have helped reduce the aircrew losses if nothing else. Let's now turn to performance, payload and range to assess the Mosquito, and compare it to the Lancaster and B-17G;

Type	Max Speed	Cruise Speed	Max Payload	Range with Max Load	Crew	Numbers built
Mosquito	415 mph	200 mph	4,000 lbs	1,500 miles	Two	7,781
B-17G	287 mph	182 mph	6,000 lbs	2,000 miles	Ten	12,731
Lancaster	282 mph	200 mph	22,000 lbs	1,550 miles	Seven	7,377

Assuming that Bomber Command wanted to stage a theoretical ‘thousand bomber raid’ albeit at a range that allowed a bomber to carry maximum bomb load. In theory, a Lancaster could deliver a staggering 22,000,000 lbs or 9,821 tons of high explosives. On the other hand, it would take 5,500 Mosquitos to deliver that weight of bombs. Such a raid with just Lancasters would have a crew of 7,000 men, whereas 5,500 Mosquitos would need 11,000 men! Theoretically that justifies the use of the heavy bombers by utilising *fewer* aircrew! In truth the return distance from a RAF Bomber airfield in Yorkshire to Berlin and back is circa 1,250 miles, so no Lancaster ever went to Berlin with maximum bomb load but it's a way of showing an alternative viewpoint. On the other hand, assuming 5.1% losses for the Lancasters, in the above example they would lose 357 aircrew while 0.5% losses for the 11,000 Mosquito aircrew would have been just 55 men.

But what about accuracy and why were 1,000 bomber raids required? It's well known that in the first half of the war that Bomber Command struggled to drop its bombs closer than 5 miles of the target on many occasions, so area bombing was the only way of hitting everything that needed hitting and more besides, such as the civilian population. But we must not forget it was total war, a fight to the death and in any case, and as Bomber Harris pointed out, something inflicted by the Germans on Warsaw, Rotterdam and dozens of other places, long before a British bomb fell on Germany in WW2. Ultimately ‘area bombing’ wasted a lot of bombs, aircraft and men. Later, with better radio aids, bombing by the four engined heavies became more targeted but accuracy was still a problem. However, the tremendous accuracy achieved by Mosquitos can be shown by comparing figures for the attacks on the V-weapons sites. The average tonnage of bombs required to destroy one of these sites by B-17 Flying Fortresses was 165; for B-26 Marauders it was 182 tons and for B-25 Mitchells 219 tons. The average for the Mosquito was just under 40 tons, which is another plus for using more Mosquitos!

But here is a thought; it has been said that German morale was not broken by area bombing, so if Mosquitos had been predominant in Bomber Command, equipped with a good array of navigation aids, and been able to carry out pin point attacks on legitimate military targets and factories, leaving civilians alone, would German morale have been better or worse if German cities were more or less intact. My guess morale would have been better with just military targets attacked, whereas despite the claims, German morale must have suffered greatly with the total destruction of homes, shops and everything else, and the laying waste of vast areas of German cities. Perversely, would precision bombing have increased the German resolve and allowed them to resist for longer? In the end it seems Allied soldiers on German soil and the total desolation from area bombing broke the German's resistance, for which the RAF's (and USAAF) four engined heavies must take some of the ‘credit’. However, Mosquitos could still have done this sort of damage in greater numbers, though without dropping any 10,000 lb ‘cookies.’ To my mind it's an interesting idea and might have worked especially if the Mosquito had been built in far greater numbers, as German defences might have been overwhelmed if 1,000 Mosquitos had attacked in varying numbers, heights and directions, day and night and perhaps protected by a great swarm of Mosquito night fighters. Understandably, the Mosquito could not drop the Tallboy or Grand Slam that was carried by the Lancaster to sink the Tirpitz or knock out vital rail tunnels etc, nor the bouncing bomb for the damn raids, so it couldn't have been the RAF's only bomber aircraft. However, the biggest reason not to use just one type in Bomber Command, is that if the Germans were able to counter the Mosquito to a high degree with a new aircraft design, or the Mosquito suffered a technical, fault that was not easy to fix, the complete Mosquito fleet might have been grounded, leaving the RAF with nothing! The jury is still out on this question! (With thanks to **Bob Hickox**)

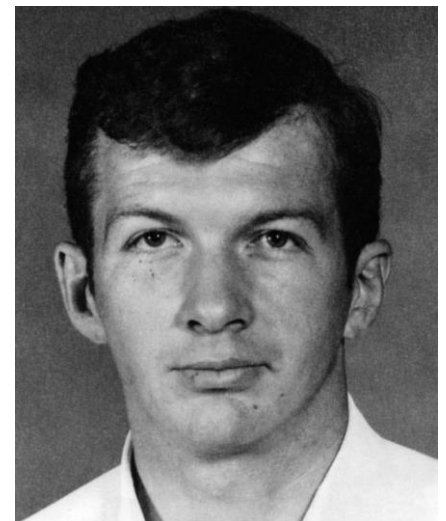
Loss of Lockheed C-130 Hercules 63-7789 - Credit BBC, with information by Lawrence Hayward



In May 1969, Sergeant Paul Meyer (*below right*) was a US Air Force mechanic based at RAF Mildenhall in Suffolk. At 23 he was already a Vietnam veteran and he was deeply unhappy; homesick for his wife and stepchildren and struggling with alcohol. His request to return to a USAF base in Langley, Virginia, had been turned down. On the fateful night of 22nd May 1969 something snapped. He drank heavily at a party and afterwards was found wondering on the A11 in Suffolk He was then arrested for

being drunk and disorderly. He was escorted back to his base and told to sleep it off. Instead, using the assumed name "Capt Epstein", Meyer got out of bed and managed to take charge of a Lockheed C-130 Hercules 63-7789 (*photo above*). Having worked as a mechanic on C-130s, he knew the protocols to get access to it, and had some working knowledge of how to fly it. Alone and still inebriated, he took off on a mission to see his wife in the USA. While flying westwards, he was able to speak to her on the phone, a call that was partly recorded (*which I believe may have been set up by the USAF in the hope that his wife would talk him out of his flight*). Meanwhile, military jets were scrambled to track him. An hour-and-a-half after take-off, radar contact with the plane was lost. A few days later its life raft washed up on the Channel Island of Alderney. Nearly 50 years later, it remains unclear if he lost control of the plane due to poor weather and his lack of experience as a pilot, or if it was (*secretly*) shot down to avert the risk of it crashing into a populated area. Now Graeme Knott of 'Deeperdorset diving', who admits to having become obsessed with the story, hopes the discovery of the wreck may finally provide an answer.

It's taken 10 years, but professional diver Grahame Knott has finally found a US Air Force plane that crashed into the Channel in 1969. The wreck may help resolve a mystery: did the homesick mechanic who made off with the aircraft from his base in Suffolk lose control - or was he shot down? "It cost me a fortune in beer," says Grahame Knott, "and I had to filter out a lot of chuff." A crucial part of his decade of research was spent in pubs along the south coast of England, looking for men who operated trawlers and scallop dredgers. These boats scrape nets along the seabed and occasionally turn up curious pieces of metal - which is what Knott was buying beer to hear about. By listening carefully, he could guess whether the objects were likely to have come from aircraft, and if so, how old they were, though it was not always easy to know exactly where they had become snagged in the net. The Channel is littered with wrecks from the two world wars and the fishermen often assumed, incorrectly, that these were what Knott was looking for. But eventually, with the information he acquired, he was able to narrow down his initial 100 Sq mile search zone to five target areas in a 30 Sq mile patch of sea. The culmination of this investigative work in snugs and public bars came in March this year, when Knott set out into the Channel to search for the 37-tonne, four-engine Hercules plane that USAF mechanic Paul Meyer had taken off in, singlehandedly and without permission, in 1969. With fellow members of his Deeper Dorset diving team, he would set out from Weymouth at 04:00 and return home 16 hours later, after a perilous day spent crossing busy shipping lanes in a 13m-long boat. Often, they had to dodge enormous container ships as they zig-zagged to-and-fro in one of the search zones. "We were looking 200m either side with our sonar equipment dragging behind us on a 250m cable, so we cut a 400m swathe," says Knott. "But our biggest fear was missing a sign of the wreck." A fully kitted-out recovery boat would have had an easier time of it, Knott acknowledges. A boat like this would have dynamic positioning devices enabling it to automatically hold its position in strong tides - but it would cost millions to buy and about £30,000 per day to operate. By contrast Knott's team had a "day vessel", not designed for long-trips, and equipment that cost about £60,000 in total. They crowdfunded to meet their petrol costs of £200 per outing. On top of that, weather and tides were often unhelpful - in nine months they could only go out 21 times. And it was only on the very last planned search day of the year, in mid-November, that the team finally found something that looked promising. There was no dramatic Eureka moment, Knott recalls, more of a slow realisation that they had made their longed-for discovery. First, sonar readings told them they had found an object of interest. They then lowered a video camera to within 2m of it so they could take a look. This confirmed it was aluminium, because of the distinctive way the metal corrodes.

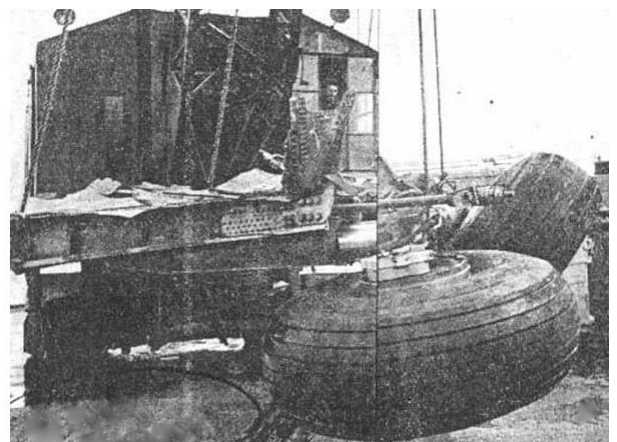


"Then we spotted a wheel sticking out the sand, then a section of wing with rivets, it just got bigger and bigger," says Knott. This was it, the Hercules that had gone missing on 23 May 1969. Knott then found himself thinking of the pilot, alone in the cockpit all those years ago. "The seabed is a lonely place," he says. The Deeper Dorset diving team have found a few wrecks in the Channel over the years. In the mid-90s they found the Aracan, a sailing ship from 1874 that had once outrun The Cutty Sark - "quite a sight," Knott recalls. They were also the first sports divers to locate the wreck of the Miniota, a WW1-era vessel that sank with silver bullion deep in the middle of the Channel, though Knott says it soon became clear that professional salvage divers had been there first, without reporting their find. Deeper Dorset are not treasure hunters themselves, Knott says. "We're story hunters who dive wrecks to satisfy our curiosity." Although Knott also runs a dive charter business, taking paying customers out to see wrecks, he says he won't do that with the Hercules. "It's not like a typical boat wreck - it's more like a sacred site, especially since Meyer's family are still alive," he says. Instead the plan is for the Deeper Dorset team to dive down to the wreck site in spring, when the underwater visibility in the Channel will have improved, and to video the wreck from all angles.



This will enable a computerised, D-image of the crash site to be constructed, and studied by air accident investigators. What Knott has seen so far has already left him puzzling. "There's a large section of the aircraft that I just can't believe would be as it is, intact, if the plane hit the water at 250 knots, its normal air speed - but I don't want to add more rumour or speculation," he says. The Hercules, of the type flown by Meyer, can be successfully ditched in water so that it floats, says David Gleave, an independent aviation safety investigator who has followed Knott's progress loosely. It would then sink, but largely keep its shape. Gleave is especially perplexed by one piece of information in the

United States Air Force official accident report from 1969, which says: "The opinion of the investigating officer is that the aircraft impacted the water with such force, immediately followed by explosion and flash fire, that survival of the occupant is most improbable." An explosion and flash fire are inconsistent with a plane hitting the water, whether the pilot lands it on water deliberately or it falls from the sky, says Gleave. But an explosion and fire would be consistent with a missile hitting the engine of the aeroplane. The official accident report says that one US fighter plane from RAF Mildenhall was scrambled to catch up with the Hercules but failed to locate it and returned to base. However, there's evidence that British and French aircraft also attempted to intercept Meyer - and the accident report makes no mention of them. "There are many parts of the puzzle still missing," Gleave says. Knott says that one of the things that has kept him going over the last 10 years is a feeling of personal affinity with Paul Meyer. "I feel strongly that his story hasn't been told," he says. "I don't think he was this drunk guy who couldn't fly. In fact, I don't think he could have been that drunk to fly for as long as he managed to." In Knott's eyes, Meyer was a man struggling with family problems and work pressure, suffering from what would be described today as post-traumatic stress disorder. Meyer was also something of a "Huckleberry Finn" character, who liked to do things his own way, as one military tutor described him. His body has never been found, though a corpse was seen floating near Jersey in July 1969, in what could have been flight gear, but was not brought to land and allowed to drift away. Even if the body had remained with the wreckage, Knott thinks none of it would be left today. Meyer's wife, Jane, now in her 80s, and his step-son, Henry Ayer, have both written to Knott since the discovery of the Hercules. Ayer is delighted, Knott says, although "it's also bittersweet for him and tinged with sadness". For the 50th anniversary of the crash, on 23 May, Knott plans to dive down and place a plaque on the wreckage. He hopes it will be possible for Meyer's family to be there for the ceremony.



A Short History of the Fleet Air Arm – Part 2 – 1941 - by Lawrence Hayward

The Battle of the Atlantic in WW2 was the longest campaign of all, lasting from the moment Great Britain declared war on Germany on 3rd September 1939 right up to VE-Day on 8th May 1945. Right from the start the FAA and RN were in action carrying out defensive patrols and giving protection to allied shipping, as best they could with limited resources, over such vast distances from South America to the Arctic Circle. This six-year struggle was vital to maintain the supply chain of food and other material to Britain in WW2, which ultimately result in victory. As Winston Churchill later stated; *“The battle of the Atlantic was the dominating factor all through the war. Never for one moment could we forget that everything happening elsewhere, on land, at sea, or in the air, depended ultimately on its outcome”*



In the very early years of the war allied ships often set sail across the North Atlantic alone and ran the gauntlet of German U-Boats and to a lesser extent, German surface ships, in the hope of hiding in such a vast ocean. However, despite the many ports of embarkation, by mid-1940 allied ships had just one important destination and that was Great Britain, which made the task of destroying them ‘all the more easy’ for the Germans. Ships arriving via the western approaches or via the Irish Sea could be spotted by a *Luftwaffe* aircraft or sail headlong in to a pack of U-Boats, waiting for some easy pickings. The Focke-Wulf Fw 200 Condor aircraft, (Photo Left) of I/KG40 flying from Bordeaux–Mérignac airfield,

had a range of nearly 2,000 nautical miles and could reach the shipping lanes west of Britain while staying outside the range of British land-based fighters. Initially the Fw 200s would bomb lone ships at low level, as such vessels were virtually defenceless, and therefore losses rose. The convoy system then took over, supported by a myriad of RN and RCN support ships increasingly equipped with ASDIC, to listen for and locate U-Boats. However, the long range Fw 200 aircraft now spotted for convoys (rather than attack them) out of range from naval AA fire, and then passed on the convoy’s position to the U-Boats. The support of the RN and RCN ships in convoy protection helped reduce shipping losses but there were still no countermeasures to the Fw 200. With so few Carriers, none could be spared to protect merchant shipping convoys that sometimes crossed the Atlantic at 15 knots! It was thought that without the Fw 200s, the U-Boats would have to search vast areas of the ocean before finding a convoy. However, unbeknown to the allied sailors risking their lives, the German decoding service *B-Dienst*, had broken the most widely used British Naval Cipher codes, such that the B-Dienst could regularly read the British and Allied Merchants Ships (BAMS) code, which proved valuable for U-Boat warfare in the early phases of the Battle of the Atlantic. Despite Bletchley Park cracking the German Enigma, which has largely overshadowed the German efforts at decoding, it was a monumental blunder by the Admiralty, not to change its Naval Ciphers for nearly four years, despite warnings by the USA and Bletchley Park and even when they knew they had been ‘broken’! Understandably, no one in 1941 was aware that British Naval Ciphers had been compromised, so their efforts still concentrated on getting airpower to cover the convoys in the mid-Atlantic. The first idea to counter the Fw 200 threat, was the fighter catapult ship; a converted freighter called a Catapult Armed Merchant (CAM) ship, manned by a naval crew, carrying a single Hawker Hurricane fighter. When an enemy bomber was sighted, the fighter would be launched into the air with rockets, and fly up to destroy or drive away the bomber. The pilots for these aircraft were drawn from the Royal Air Force (RAF). The RAF formed the Merchant Ship Fighter Unit (MSFU) at it was in action from May 1941. However, CAM ships were very much a stop gap and the RN had other ideas in the acquiring Escort Carriers, the first of which was HMS Audacity, which was a conversion of a German merchant ship *Hannover*, which the Royal Navy captured in the West Indies in March 1940. Such ships still carried a cargo but had flat tops without a coning tower. At the same time as Audacity was being commissioned the FAA was receiving more deliveries of the Grumman F4F Martlet (Photo Right). Even before the USN purchased this aircraft, the French Navy and the Royal Navy Fleet Air Arm (FAA) had ordered the Martlet, with their own configurations, via the Anglo-French Purchasing Board. The F4F was taken on by the FAA as an interim replacement for the Fairey Fulmar.





The Fulmar was a two-seat fighter with good range but operated at a performance disadvantage against single-seater fighters. Navalised Supermarine Spitfires were not available because of the greater need of the RAF. In the European theatre, the F4F scored its first combat victory on Christmas Day 1940, when a land-based Martlet destroyed a Junkers Ju 88 over the Scapa Flow naval base. Six Martlets (some sources say eight) went to sea with 802 Naval Air Squadron aboard HMS Audacity in September 1941 (*Photo Left*) and shot down several Luftwaffe Fw 200 Condor bombers during highly effective convoy escort operations. As can be seen in the photo of Audacity, the aircraft were stored and serviced in

the open. It is a credit to the FAA Fitters working in all weathers and sea conditions who allowed the aircraft to be flown off at a moment's notice. Martlets of 802 NAS were the first to engage in aerial combat at sea. One such pilot on HMS Audacity was CAS guest speaker, the late Eric M. 'Winkle' Brown, (*Photo Right*) who thought the Grumman fighter was one of the finest shipboard aeroplanes ever created, and he shot down an Fw 200 in one. Sadly, HMS Audacity was sunk on 21st December 1941 but it was the start of things to come and more Escort Carriers were built in 1941 under Lease-Lend and eventually the RN had forty-five such ships. Although barely a third the displacement of the Fleet Carriers fighting elsewhere, Escort Carriers were able to close the mid-ocean gap in protecting the convoys, and later were 'cut loose' from their convoys to pursue the U-Boats wherever they may be, so U-Boats became the prey. Even before Escort Carriers were equipped with rocket firing strike aircraft, the Martlets by their very presence were able to ward off enemy aircraft and, increasingly, to spot and hunt submarines, which could be attacked by a ship despatched from the convoy. While the U-Boat threat was well under way in 1941, the German *Kriegsmarine*, still had ideas that their capital ships could cause great havoc with allied convoys in the Atlantic. To this end *Bismarck* conducted an offensive operation, lasting 8 days in May 1941. The ship, along with the heavy cruiser *Prinz Eugen*, was to break into the Atlantic Ocean and raid allied shipping heading to Great Britain. The two ships were detected several times off Scandinavia, and British naval units were deployed to block their route. At the Battle of the Denmark Strait, the battlecruiser *HMS Hood* initially engaged *Prinz Eugen*, while *HMS Prince of Wales* engaged *Bismarck*. In the ensuing battle *Hood* was destroyed by the combined fire of *Bismarck* and *Prinz Eugen*, which then damaged *Prince of Wales* and forced her retreat. *Bismarck* suffered sufficient damage from three hits to force an end to the raiding mission. The destruction of *Hood* spurred a relentless pursuit by the RN involving dozens of warships and two Carriers. *HMS Victorious* which sighted *Bismarck* on 24th May, and launched an attack by Fairey Swordfish of 825 NAS on 25th May, and scored a single hit which slowed her. Another series of attacks by Fairey Swordfish of 810 and 818 Naval Air Squadrons flying from HMS *Ark Royal*, the following day, succeeded in disabling *Bismarck's* steering gear, such that she could not keep a straight course. Interestingly it is said that the Fairey Swordfish flew so slowly in to the attack that the German AA predictors could not register their range accurately and the Germans resorted to firing the main armament at them to cause great splashes in front of the Swordfish but to no avail. In her final battle with ships of the Home Fleet on 27th May, the already-crippled *Bismarck* sustained even more damage, with heavy loss of life. It is said the *Bismarck* was actually scuttled by her crew but most experts agree that the battle damage would have caused her to sink eventually. *Bismarck's* destruction was another morale boost to the UK in a rather bleak period of the war, but the loss of *HMS Hood* was not revealed for some time. Although it may not have been appreciated at the time, Carrier based airpower was in the ascendency, thanks to the FAA, and Battleships were resigned to history! The FAA had crippled the Italian Navy in 1940, and now with the loss of *Bismarck*, the *Kriegsmarine's* fleet of Battleships and Heavy Cruisers like *Tirpitz*, *Scharnhorst* and *Gneisenau*, were mostly kept in port. The Imperial Japanese Navy (IJN) also came to the same conclusion with their Carrier borne attacks on Pearl Harbor, which gave the USA a reason to join the war against the Axis. Interestingly, only USN Battleships were destroyed in the attack on Pearl Harbor, while the US Navy Carriers conveniently left Pearl Harbor shortly before the attack and sailed off in to the Pacific, in a completely different direction, rather than set a course that would have allowed them to intercept the IJN Fleet, in case that might have revealed that the USA knew in advance of the attack on Pearl Harbor! Instead the attack was allowed to happen anyway, the US public were outraged, and US neutrality was dumped overnight!



1969

July 1 No. 1 Sqn RAF becomes the first operational fixed-wing vertical-take-off-or-landing (VTOL) Sqn in the world.

July 1 First flight of the Sukhoi Su-17 (NATO reporting name "Fitter-C")

July 1 The Grumman Aircraft Engineering Corporation becomes the Grumman Aerospace Corporation.

July 10 A 16-year-old boy attempts to hijack Avianca Flight 654, a Douglas C-54B-5-DO Skymaster (registration HK-186), about 20 minutes after take-off from Barranquilla, Colombia, for a domestic flight to Santa Marta and demands that it fly him to Cuba. A crew member and a passenger subdue him, and the airliner returns to Barranquilla.

July 17 The last air-to-air combat between piston-engined fighters takes place, when Honduran Air Force Colonel Fernando Soto, flying an F4U-5 Corsair fighter, shoots down three Salvadoran Air Force fighters – two FG-1 Corsairs and an F-51 Mustang – during the Football War (or "Soccer War") between El Salvador and Honduras. Soto becomes the only person to score an air-to-air kill during the war, the only person to score three air-to-air kills during a war in the Western Hemisphere, and the last person to score a kill in combat between two propeller-driven aircraft.

July 20 Neil Armstrong becomes the first man to walk on the moon.

July 26 A wheel-well stowaway inside a Douglas DC-8 survives a flight from Havana, Cuba to Madrid, Spain.

July 31 A prisoner escorted by two federal agents aboard Trans World Airlines Flight 79, a Boeing 727 flying from Pittsburgh, Pennsylvania, to Los Angeles, California, with 131 people aboard, grabs a razor blade and uses it to take a female flight attendant hostage. He forces the plane to fly him to Havana, Cuba.

August South Vietnam receives its first fixed-wing gunships when the Republic of Vietnam Air Force's 817th Combat Squadron takes over control of 16 Douglas AC-47 Spooky aircraft transferred from the United States Air Force.

August 1 Trans World Airlines initiates transpacific and around-the-world service.

August 4 Three passengers hijack an Avianca Douglas DC-4 (registration HK-115) with 68 people on board shortly after it takes off from Santa Marta, Colombia, for a domestic flight to Riohacha and demand to be flown to Cuba.

August 5 John Scott McReery, a 73-year-old passenger aboard Eastern Airlines Flight 379 – a Douglas DC-9 with 70 people on board flying from Charlotte, North Carolina, to Tampa, Florida – walks into the cockpit shortly after take-off armed with 5-inch straight razor and a knife and says "Let's go to Cuba" to the flight crew. After the pilot tells him that the airliner lacks the fuel to reach Cuba, McReery returns to his seat and acts as if nothing had happened for the rest of the flight. He is arrested after the plane lands in Tampa, and tells the police that he did not actually want to go to Cuba and merely wanted to see if he had the courage to simulate a hijacking. McReery becomes the oldest person to attempt to hijack an aircraft.

August 14 Northeast Airlines Flight 43, a Boeing 727 with 52 people on board flying from Boston, Massachusetts, to Miami, Florida, is over the Atlantic Ocean about 40 miles east of Jacksonville, Florida, when two male passengers armed with a gun and a knife hijack it. They force it to fly to Havana, Cuba, where they disembark from the plane.

August 15 Operation About Face begins in Laos. Air America helicopters airlift Meo and Thai guerrillas led by Vang Pao behind enemy positions while the Royal Lao Army pushes across the Plain of Jars. Heavy American air support peaks at 300 sorties per day.

August 16 Four hijackers take control of an Olympic Airways Douglas DC-3 with 28 people on board making a domestic flight in Greece from Athens to Agrinio and force it to fly to Valona, Albania, where they surrender to authorities.

August 16 Darryl Greenamyer sets a new piston-engine airspeed record in a heavily modified F8F Bearcat named *Conquest I*. His record speed of 478 mph topples the piston-engined speed record set by a Bf 109 pilot in Nazi Germany that had stood since August 1939.

August 18 Six hijackers take control of a Misrair Antonov An-24 making a domestic flight in Egypt from Cairo to Luxor. The airliner diverts to El Wagah, Egypt.

August 23 – Shortly after Avianca Flight 675, a Hawker Siddeley HS-748-245 Series 2A (registration HK-1408) with 27 people on board, takes off from Bucaramanga, Colombia, for a domestic flight to Bogotá, two hijackers commandeer it and demand to be flown to Cuba. The airliner stops to refuel at Barranquilla, Colombia, before proceeding to Santiago de Cuba in Cuba.

August 25 First flight of the Fairchild Swearingen Metroliner

August 29 Thinking that Israeli Ambassador to the United States Yitzak Rabin is aboard, two members of the Popular Front for the Liberation of Palestine, Leila Khaled and Salim Issawi, hijack Trans World Airlines Flight 840, a Boeing 707-331B on a flight from Rome, Italy, to Tel Aviv, Israel, with 127 people aboard. Rabin is not aboard, and the hijackers force the plane to land in Damascus, Syria, where they release all the hostages unharmed except for two Israeli passengers and blow up the aircraft's nose section. The two Israelis eventually will be set free unharmed in December.

Aug 29 Accompanied by his wife and three children aboard National Airlines Flight 183 – a Boeing 727 with 55 people on board flying from Miami, Florida, to New Orleans, Louisiana – Jorge Caballo enters the cockpit armed with a .32-caliber pistol and forces the airliner to fly to Havana, Cuba, where the family disembarks. It is the 25th U.S. hijacking of 1969. There were many more hi-jacks during the above period, these are just few examples.

August 30 First flight of the Tupolev Tu-22M

August 31 World champion boxer Rocky Marciano dies along with two other people when the privately owned Cessna 172H Skyhawk in which he is a passenger strikes a lone oak tree and crashes while its inexperienced pilot is attempting to land at night in bad weather at a small airfield outside Newton, Iowa.

1979

July 1 North Central Airlines and Southern Airways merge to form Republic Airlines, with headquarters at Minneapolis-St. Paul International Airport in Minneapolis, Minnesota.

July 2 The Swiss airline Crossair begins scheduled service, offering flights from Zurich, Switzerland to Nuremberg West Germany, Innsbruck, Austria, and Klagenfurt, Austria.

July 9 A hijacker commandeers an Aérolíneas Condor Fokker F27 Friendship during a domestic flight in Ecuador from Tulcán to Quito, demanding to be flown to Costa Rica. The hijacker is taken down at Quito.

July 11 A Garuda Indonesia Fokker F-28 Fellowship (registration PK-GVE) crashes into Mount Sibayak on Sumatra in Indonesia, killing all 61 people on board.

July 13 The U.S. Federal Aviation Administration restores the Douglas DC-10's type certificate, allowing U.S. DC-10s to fly and foreign DC-10s to operate in the United States for the first time since June 6.

July 20 A hijacker takes control of United Airlines Flight 320 – a Boeing 727 with 126 people on board flying from Denver, Colorado, to Omaha, Nebraska – and demands to be flown to Cuba. The hijacker is taken down at Omaha.

July 21 First flight of the Bell 214ST

July 23 The British government announces plans to privatise British Airways and publicly sell British Aerospace shares.

July 24 Bell XV-15 – first transition from helicopter to airplane mode.

July 25 A hijacker commandeers a Biman Bangladesh Airlines Fokker F27 Friendship during a domestic flight in Bangladesh from Jessore to Dacca and demands ransom money. The airliner diverts to Calcutta, India, where the hijacker surrenders.

July 27 Israeli Air Force Kfir C.1 fighters escorting reconnaissance aircraft over Lebanon encounter Syrian Air Force MiG-21 (NATO reporting name "Fishbed-J") fighters and shoot one down with a Shafrir-2 air-to-air missile. It is the only aerial victory by a Kfir C.1 in Israeli service.

July 31 Dan-Air Flight 0034, a Hawker Siddeley HS 748 (registration G=BEKF), crashes into the sea while attempting to take off from Sumburgh Airport on the Shetland Mainland in Scotland, drowning 17 of the 47 people on board.

July 31 Western Airlines Flight 44, a Boeing 737-200, mistakenly lands at Buffalo, Wyoming, instead of its intended destination, which is Sheridan, Wyoming. No one is injured, and the only damage is to the tarmac at the airport, which was not designed to support the weight of the jetliner. The incident prompts a legal battle and subsequent landmark aviation ruling in *Ferguson v. NTSB* in June 1982.

August Six months after the Iranian Revolution, all 79 of the Islamic Republic of Iran Air Force's F-14 Tomcats have been sabotaged to prevent them from firing AIM-54 Phoenix air-to-air missiles, and most of its combat aircraft are not operational; most Iranian helicopters are not airworthy, and Iran has made plans to cannibalize half of its helicopters for spare parts in order to fly the remainder.

August 2 New York Yankees catcher Thurman Munson is practicing take-offs and landings at the controls of a Cessna Citation I/SP (registration N15NY) with a friend and a flight instructor on board at Akron-Canton Regional Airport in Green, Ohio, when the Citation comes down short of the runway and crashes during a landing attempt, killing Munson and injuring the other two men.

August 3 An Aeroflot Let L-410M Turbojet (registration CCCP-67206) experiences an engine failure on approach to Rzhnevka Airport in Leningrad Oblast in the Soviet Union's Russian Soviet Federated Socialist Republic. Its crew attempts a go-around, but the airliner crashes (0.3 miles) northeast of the airport, killing 10 of the 14 people on board.

August 4 An Indian Airlines Hindustan Aeronautics Ltd. HAL-748-224 Srs.2 (registration VT-DXJ) crashes in the Kiroli Hills while on approach to Santacruz Airport in Bombay, India, killing all 45 people on board.

August 5 Three armed men seeking to escape from the Spanish Foreign Legion hijack an Iberia Douglas DC-9-32 (registration EC-BIT) at Puerto del Rosario in the Canary Islands. After a stop at Lisbon, Portugal, the plane flies them to Geneva, Switzerland, where they surrender.

August 11 Two Aeroflot Tupolev Tu-134A jetliners (registrations CCCP-65816 & 65735) collide in mid-air over Dneprodzerzhinsk in the Soviet Union's Ukrainian Soviet Socialist Republic, killing all 156 people aboard the two planes. Among the dead are 17 players and staff of the then-Soviet-top-division Pakhtakor Football Club team.

August 14 Steve Hinton sets a new piston-engined airspeed record in a specially-modified P-51 Mustang named the *RB51 Red Baron*. He reaches 499 mph (803 km/h) over Nevada.

August 16 A hijacker commandeers Eastern Airlines Flight 980 – a Boeing 727 with 91 people on board – during a flight from Guatemala City, Guatemala, to Miami, Florida, demanding to be flown to Cuba. The hijacker surrenders at Miami.

August 21 First flight of the Van's Aircraft RV-4

August 22 A hijacker takes control of United Air Lines Flight 739 – a Boeing 727 with 120 people on board – during a flight from Portland, Oregon, to Los Angeles, California. The plane diverts to San Francisco, California, then returns to Portland, where the hijacker surrenders.

August 24 During a domestic flight in the Soviet Union from Norilsk to Krasnoyarsk, all four engines of an Aeroflot Antonov An-12TB (registration CCCP-12963) flame out. The crew attempts to reach Yeniseysk Airport in Yeniseysk, but has to make a forced landing on a wooded hillside 18 (11.3 miles) from Yeniseysk. The airliner bursts into flames, and 11 of the 16 people on board die.

August 24 A hijacker commandeers a Libyan Arab Airlines Boeing 727 during a domestic flight in Libya from Benghazi to Tripoli, demanding to be flown to a non-Arab country. The plane diverts to Larnaca, Cyprus, where the hijacker surrenders.

August 29 When a crew member inadvertently extends a flap while an Aeroflot Tupolev Tu-124V (registration CCCP-45038) cruises at 27,000 feet (8,230 meters) during a flight from Kiev in the Soviet Union's Ukrainian Soviet Socialist Republic to Kazan in the Russian Soviet Federated Socialist Republic, the airliner goes into a spin. It disintegrates at an altitude of 3,000 meters (9,842 feet) and crashes near Kirsanow, killing all 63 people on board.

August 30 A U.S. Navy CH-53D Sea Stallion helicopter of Air Transport Squadron 24 (VR-24) lifts a 12-foot (3.7-meter) statue of the Madonna and Child too large to transport by land to the top of Mount Tiberius on the Italian island of Capri, replacing one destroyed by lightning.

1989

July 4 Crash of an unmanned MiG-23 in Kortrijk, Belgium. The pilot had believed he was experiencing an engine failure shortly after take-off from the Soviet airbase near Kolobzreg, Poland and had ejected, while the aircraft continued on autopilot for 900 km (559 miles), until running out of fuel. One 18-year-old man on the ground was killed in the crash.

July 16 European air traffic is halted due to industrial action by French air traffic controllers.

July 17 First flight of the B-2 Spirit

July 19 United Airlines Flight 232, a Douglas DC-10 (registration N1819U), suffers decompression in and catastrophic failure of its tail-mounted engine, knocking out all its flight controls. In what is considered a prime example of successful crew resource management, the plane's crew manages to use engine throttles to fly the plane to Sioux City, Iowa, where it crashes on landing. Although 111 of the people on board die, including Continental Basketball Association Commissioner Jay Ramsdell, the crew saved the other 185 passengers by coaxing the aircraft to Sioux City.

3 August an Olympic Aviation Short 330-200 (registration SX-BGE), operating as Olympic Aviation Flight 545, crashed on a hillside in Samos island, Greece, while attempting a landing approach in thick fog. All 3 crew members and 31 passengers were killed.

August 5 – Piedmont Airlines merges into USAir.

August 7 - Flying Tiger Line merges into Federal Express.

August 9 – L'Express Airlines begins operations, offering 45 weekly flights to seven Louisiana cities: Alexandria, Baton Rouge, Lafayette, Lake Charles, Monroe, New Orleans, and Shreveport.

August 13 Larkin I. Smith, a member of the U.S. House of Representatives representing Mississippi's 5th Congressional District, and his pilot are killed when their Cessna 177 Cardinal crashes in a forest near Janice, Mississippi, while flying in hazy weather. Rescuers must bulldoze their way through the forest to reach the plane's wreckage, delaying the recovery of the bodies until the following day.

August 18 A Qantas Boeing 747-438 (registration VH-OJA), the *Spirit of Australia*, flies non-stop from London to Sydney, setting a world record for a four engine jet, after having flown 11,000 miles in 20 hours.

August 21 *Rare Bear*, a highly modified Grumman F8F Bearcat, sets a new piston-engined speed record of 528.33 mph (850.77 km/hr).

August 22 Soviet aeronautical engineer & founder of the Yakovlev Design Bureau Alexander Yakovlev dies, aged 84.

New York-based **JetBlue Airways**, which has 60 Airbus A220-300s on order, has purchased two full-flight simulators (FFSs) for the type from training provider CAE.

Bombardier has announced plans to divest its aerostructures businesses in Belfast, Northern Ireland, and Morocco and to form an integrated Bombardier Aviation unit with manufacturing operations in Canada, Mexico and the US.

SkyWest Airlines could see converting some of its 100 Bombardier CRJ700s into 50-seat CRJ550s to support United Airlines' push into premium-class service on small, high-yield regional routes.

Air France-KLM reported a first-quarter net loss of €320 million (\$358 million), widened from a €269 loss in the 2018 quarter, and the group's CEO said investors will receive a strategy update later this year.

Easyjet, the largest airline at Southend Airport, is gearing up for a record number of passengers from the airport this summer, and are expected to carry over 830,000 passengers, an increase of over 20% year on year.

Icelandair posted a first-quarter net loss of \$55 million, widened from a \$35 million net loss in the year-ago quarter as pressure on airfares, higher costs and Boeing 737 MAX grounding created uncertain.

Russian regional carrier **Yamal Airlines** will not take the last of 10 Sukhoi Superjet 100s (SSJ100s) from an order for 25, Yamal CEO Vassily Kryuk reportedly told the Interfax newswire this week.

A simulator session flown by a US-based **Boeing 737 MAX** crew that mimicked a key portion of the Ethiopian Airlines ET302 crash sequence suggests the Ethiopian crew faced a near-impossible task of getting the aircraft back under control, and underscores the importance of pilots understanding severe runaway trim recovery procedures.

French air accident investigation bureau BEA is gearing up for a new search phase in Greenland, still hoping to find a key fragment of the **Air France** Airbus A380 engine that lost its fan in flight on Sept. 30, 2017.

Allegiant Air's fast-tracked shift to an all-Airbus fleet is paying dividends, according to numbers from its first full quarter since it parked up its last McDonnell Douglas MD-80.

Air France plans to reduce its short-haul capacity in terms of available seat kilometres (ASKs) by 15% by end of 2021 and cut 465 jobs without forced departures due to growing competition from high-speed trains and low-cost airlines.

Vinci Airports has completed the purchase of its controlling 50.01% stake in **London Gatwick Airport**, the French company announced May 14.

Air Canada signed an agreement May 16 to acquire Montreal-based Air Transat, which would accelerate the Canadian flag carrier's push into leisure destinations and add to already dominant positions in several markets, notably its home turf and Europe.

Airbus is offering both versions of the A220 at substantially increased ranges and is working on a further upgrade of the A321LR to improve that model's range capabilities further.

Boeing 737 MAX operators still do not know when they will be cleared to put their aircraft back in service, but one thing is certain: Getting the 370-aircraft fleet flying presents a significant logistical undertaking for the airlines, suppliers and the manufacturer.

Dutch national carrier **KLM** and Ireland-based regional airline **CityJet** are the two main shareholders behind a Belgian startup, **Air Antwerp**, being created to operate both scheduled services and provide capacity for others.

Air New Zealand, in a widely anticipated decision, has selected the Boeing 787-10 for its widebody fleet upgrade.

Air France-KLM LCC subsidiary **Transavia France** is poised for expansion after Air France pilots voted in favour of starting negotiations to increase the number of aircraft the airline can operate.

Indian carrier **Vistara Airlines** will lease two Airbus A320neos and four Boeing 737-800NGs from Singapore-based lessor BOC Aviation.

The Greenlandic government has taken full ownership of **Air Greenland**, after Scandinavian Airlines (SAS) and the Danish government agreed to sell their shareholdings.

The **Airbus-Bombardier** joint venture that is producing the A220 officially changes its name to the Airbus Canada Limited Partnership on June 1.

Britten-Norman is planning to create a new regional airline based in Malta to serve initially charter operations after which they hope to commence scheduled services.

Icelandair will lay off 24 pilots and will not be hiring 21 new pilots, because of the ongoing worldwide grounding of the Boeing 737 MAX.

Operators of more than 300 newer **Boeing 737s**—including nearly half of the in-service MAXs—will be ordered to inspect slat tracks and remove parts identified as being from a batch that may not meet Boeing's production requirements, the FAA and the company said June 2.

Fiji Airways has decided against plans to order Airbus A330neos, instead opting to add two A350s while keeping its A330neos longer.

Marshall Aerospace and Defence Group, has said in a statement that it is to close **Cambridge Airport** by 2030 and turn the site into a 12,000-home housing estate.

Loganair has introduced a ‘six times a week’ service from Southend Airport (SEN) to Stornoway (SYR) via Glasgow operated by an Embraer 145 regional jet.

The **De Havilland Canada** (DHC) brand has been resurrected by Longview Aviation Capital to oversee the Dash 8 programme. Longview, which also owns Viking Air, acquired the turboprop production line and other assets, including type certificates for 100, 200, 300 and Q400 variants, as well as rights to the DHC name and trademark in November.

The already delayed first flight of the **Boeing 777-9**, currently targeted for the end of June, looks set to be pushed back again after an ‘anomaly’ was detected in a General Electric GE9X engine undergoing pre-delivery factory tests. Maybe Rolls Royce still have still got a chance of being a supplier for Boeing 777-9. A new regional carrier set to begin operations in June aims to make it easier for residents of northern Denmark to travel to tourist destinations. **Great Dane Airlines** plans to launch scheduled services June 21 from Aalborg, Denmark, to Edinburgh, Dublin and Nice. The full-service carrier will initially operate two Embraer E195s purchased from Ireland-based Stobart Air.

Irish LCC Ryanair is purchasing Maltese start-up airline **Malta Air**, adding another brand to its portfolio as it continues with plans to transition to a holding company structure overseeing separate airline brands. The Irish carrier is to transfer five of its Maltese based Boeing 737s to this new subsidiary.

Ukraine International Airlines (UIA)—which had planned to take delivery of three Boeing 737 MAX 8s beginning in mid-April—is considering switching from Boeing to Airbus aircraft as a long-term fleet strategy step.

British Airways pilots are considering strike action after voting to reject the latest pay package offered by the airline.

Boeing’s full-scale Passenger Air Vehicle (PAV) electric vertical-take-off-and-landing (eVTOL) prototype crashed earlier in June during unmanned flight testing at subsidiary Aurora Flight Sciences in Manassas, Virginia.

CFM International is redesigning the bearing in the radial drive shaft of the LEAP-1B that powers the Boeing 737 MAX after five in-flight engine shut down incidents due to an oil filter bypass warning light indicated in the cockpit.

TAP Air Portugal has become the first airline to operate transatlantic services with the Airbus A321LR. The carrier used its maiden example, CS-TXA (c/n 8593).

Switzerland’s **Germania** Flug AG has rebranded as Chair Airlines, effective July 1.

Irish LCC Ryanair subsidiary **LaudaMotion** is exploring a fifth base outside its German-speaking home market and is on track to operate at least 35 Airbus A320s by summer 2020.

As part of a major shake-up of its regional jet strategy, **Mitsubishi Aircraft** has rebranded the former MRJ90 as the SpaceJet M90 and has announced details of the stretched MRJ70 redesign, called the M100.

Following mounting losses and the June 16 profit warning, the Lufthansa Group announced sweeping changes for its **Eurowings** low-cost unit.

French airport operator Groupe ADP plans to install an experimental vertiport at one of its 10 Paris-area aerodrome locations to test all components of an urban air mobility (UAM) service that could be launched for the 2024 Summer Olympic Games, which will be hosted by Paris.

Japan’s Mitsubishi Heavy Industries and **Bombardier** have struck a deal on the sale of the Canadian manufacturer’s Canadair Regional Jet program for \$550 million and assumption of some debt.

Estonia’s national airline, **Nordica**, will give up operating commercial flights in its own name for the foreseeable future, blaming overcapacity at its home hub at Tallinn Airport.

Airbus founding father and visionary Robert Bêteille died on June 14 at age 97, Airbus announced June 25.

According to Airbus, Bêteille not only shaped Airbus Industrie but also the Toulouse-based manufacturer’s first commercial aircraft—the A300B. By the time the A300B made its first flight on Oct. 28, 1972, Bêteille had gained a strong understanding of airline’s needs, something he put to good use during a decade-long campaign to gain customers. Despite the lean years that followed the OPEC oil crisis, his efforts culminated in the A300’s first US customer, Eastern Airlines, in 1977.

PARIS AIR SHOW NEWS

Airbus launched the long-expected A321XLR on the opening day and expects airlines to operate “hundreds” of the aircraft over time as new secondary long-haul markets are developed.

Air Lease Corp. (ALC) placed an order for 50 Airbus A220-300s on the opening day. The US lessor plans to take delivery of the aircraft between 2021 and 2026, according to the terms of the preliminary order.

Chicago-based **United Airlines** will top up its fleet of Embraer E175s with a further firm order for 20, plus 19 options.

Virgin Atlantic will acquire 14 Airbus A330-900s, with an option for six more, in a move CEO Shai Weiss said will position the carrier for future growth.

International Airlines Group (IAG) gave Boeing a significant and highly public boost at the Paris Air Show June 18, announcing a tentative deal for 200 MAX 737s. IAG group includes British Airways, Iberia & Aer Lingus all of whom use Airbus aircraft for short haul operations and have members of the A320neo currently on order. The British Airways Gatwick fleet of A320 will be replaced by the Boeing 737MAX as the current fleet of Airbus at Gatwick are not compatible with the main BA fleet. How the public will react to flying in a 737MAX is yet to be seen! (*Ed*)

The other 737Maxs are expected to be operated by Level and the Spanish LLC Vueling. Airbus has not given up yet on securing a major narrow body order from International Airlines Group (IAG)—flipping a commitment announced by the company for the Boeing 737 MAX earlier.

Also, IAG became the third customer for the new Airbus A321XLR when it ordered eight of the ultra-long-range narrow bodies for Spanish carrier Iberia and six for Irish carrier Aer Lingus, plus 14 options.

Cebu Pacific signed an MOU for 16 Airbus A330-900s, five A320neos and 10 A321XLRs, the newest and longest-range version of the A321neo. The MOU was among a set of new Airbus aircraft order announcements made on the second day of the show that included **AirAsia, Delta Air Lines and Saudia**.

Regional aircraft lessor **Nordic Aviation Capital** has signed a \$2 billion letter of intent to take 35 more ATRs, along with 35 options and purchase rights on a further 35 aircraft. Also (NAC) has signed an MOU with Airbus for 20 A220 family aircraft. The newly launched Airbus A321XLR saw another major order boost with an MOU for 50 of the long-range narrow bodies from US private equity firm **Indigo Partners**.

American Airlines will acquire 50 Airbus A321XLRs, adding 20 new aircraft to an order of 30 A321neos that have been converted to the new long-range narrow body.

Qantas is the latest airline to order Airbus A321XLR, with conversions and new orders covering 36 of the new variants.

KLM Cityhopper signed a \$2.5 billion deal with Embraer for 15 firm Embraer E195-E2 aircraft plus 20 purchase rights.

ATR used the third day of the show to announce a new short take-off and landing (STOL) version of the ATR 42-600 (ATR 42-600S), with 17 provisional orders already secured, as well as another 23 orders for its existing product range.

Irish leasing company **Accipiter Holdings** has placed its first new aircraft order, opting for 20 Airbus A320neo aircraft.

JetBlue Airways will convert 13 aircraft in its existing Airbus A321neo order book to the XLR version—launched earlier this week—for delivery scheduled to begin in 2023.

Flynas, Saudi Arabia's first low-cost airline, has signed an MOU with Airbus for 10 A321XLR aircraft, which was launched earlier in the week.



Airbus celebrated their 50th year of operations at the Paris Air Show. (Photo Airbus)

Appeal by the Editors

Dear Members, it is quite a tall order to maintain a flow of articles for Airwords, without your input. I guess that as many of you have either been a member of the armed services, a paying passenger, or airline employee it would be good if you could write something for us, which we can illustrate with photos if necessary. I don't know of anyone who does not have an amusing anecdote from yester year! So if you have some 'gen' on someone who got stuck inside an aircraft they were servicing, left a hammer in the flaps, took off astride the tail of an aircraft, or 'good old Charlie' who got ingested in to a jet engine on Friday but was back at work on the Monday, do let us know.