# **Chiltern Airwords**



Vickers Supermarine Spitfire LF Mk.XVI E, RW382 at Old Sarum 2015. Photo Credit Peter Fraenkel

# The Chiltern Aviation Society Magazine May - June 2020

# **CHAIRWORDS**

As I write we are in the middle of the Coronavirus shutdown. This is an experience that none of us have ever had to endure and it is extremely difficult to comprehend. Incredible acts of courage have emerged and although physical contact has not been permitted there has been a considerable bonding across our communities. In the middle of all this, here's a personal anecdote which I hope will raise a smile. I was in the pensioners' queue at Ruislip Waitrose store recently for our weekly shopping. I made sure that I kept the statutory two-metre gap between myself and the next customer as we waited. Behind me was a very affable gentleman and, eventually, he asked me how I was coping. "Quite well," I replied; "I have a large garden for exercise and I'm an aviation historian which keeps me mentally active." "That's interesting," he replied. "I have a friend in Windsor who is an aviation researcher. He belongs to an aviation society run by a chap called Keith Hayward here in Ruislip." Before he could continue with some possibly damaging personal comments I replied, "That's me!" His face was a picture. His friend, of course, is CAS member Keith Cameron. A small world indeed! I should have asked him if he would like to join us but – sadly – I didn't get his name or contact. Let's hope that we will soon be able to meet up again as a Society and get back to some sort of normality.

To finish on a sad note, I have to report the passing of one of our oldest members, and personally my oldest friend, Cecil Gullen, from Covid-19 aged 91. Cecil and I were both in the 1/3<sup>rd</sup> Ruislip Cubs and Scouts in pre-war and wartime days. We attended several camps together. Post-war, Cecil joined the RAF on extended National Service, in 1947 and trained as a Navigator on Wellingtons, after dropping out of his Pilot training course, as in his own words, he could not judge height when landing a DH Tiger Moth! Later he joined Freddy Laker's Air Charter as a Navigator on long haul charters to Australia and the Woomera Rocket Site. He survived a crash in an Avro Tudor IVB on take-off at Brindisi, Italy on 27<sup>th</sup> January 1959. Later he worked as a Navigational Instructor with the Royal Jordanian Air Force for several years. A bachelor, Cecil was quite a shy person and a man of few words, but a true friend. He was a loyal member of CAS and will be sorely missed. Rest in peace Cecil. Keith Hayward

#### ASSISTANT EDITOR WORDS

Once again thanks for the articles sent in so far, especially from Keith, who seems to have written half of this issue! Luckily there has been an increase in articles, such that I have written none of this issue! Perhaps for the future another selection of photos from your photo albums would be interesting to follow Peter Fraenkel's. Photos may be emailed on highest resolution to me, singularly or in groups (allowing for maximum MB of 25MB). I want to make a page of other submissions. Lastly, when emailing photos and words to my new email - <u>cas.editors2020@gmail.com</u> keep them separate please.

#### KEITH HAYWARD. Chairman

52 Pinn Way, Ruislip, Middx HA4 7QF; Phone 01895 637872.

JOHN ROACH. Vice Chairman / Membership Secretary 13 Thames Drive, Ruislip, HA4 7AY Phone 01895 637222 e-mail; cas.vice-chairman@outlook.com

LAWRENCE HAYWARD. Club Secretary / Assistant Editor 91 Hartland Drive, South Ruislip, Middx, HA4 0TJ Phone 0208 8453414 e-mail; cas.clubsecretary@outlook.com or cas.editors2020@gmail.com (new email)

#### PAUL KENDALL Webmaster

e-mail; chilternaviation@btinternet.com WEB SITE www.chilternaviationsociety.wordpress.com

#### DAVID KENNEDY - Editor

69, Sharps Lane, Ruislip HA4 7JD. Phone 01895 637202. NO E-Mail or internet access, but help is on the horizon! For future items please send to me on paper OR e-mail articles directly to Lawrence at the above email addresses.

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**MEETINGS:** Fourth Wednesday of the month (third in December) 8pm to 10 pm at *Ruislip Methodist Church Hall, Ickenham Road, Ruislip, Middx, HA4 7BX.* 

#### 2020 PROGRAMME;

# ALL CANCELLED UNTIL FURTHER NOTICE



In an earlier article I described an incident during 'Panda' Watson's early days with Western Airways flying a DH Rapide in fog. His story of his acceptance as a pilot with that airline is equally hair-raising. In the mid-1930s he arrived at Weston-Super-Mare Airport (*above via John Stroud*) with a brand new 'B' licence looking for a job. He was granted an interview. "How many flying hours have you? How many hours on twin engines? Any night flying?" and "Are you married?" That last question always puzzled Panda. After apparently satisfying the Chief Pilot with his answers he was led out to a very tired looking DH Dragon on the tarmac. As there was no co-pilot's seat on the Dragon he had to lean over the pilot's shoulder whilst the handling instructions were explained. After this Panda asked if there was a manual he could study. "Oh, there's one around somewhere, I'll have a look." As far as practical training was concerned the Chief Pilot demonstrated a couple of take-offs and landings and then Panda was sent off on his own, bearing in mind that he had no twin-engined experience at all. That afternoon he was sent off with passengers; blissfully they were not aware of his lack of experience. He staggered into the air, clearing the hedge at the airfield boundary and the main road alongside. When he returned, he mentioned this in the Crew Room to another pilot who replied "Oh yes, that often happens. It must be a bit short in that direction."



With tension building in Europe, the UK was stepping up its military defences and the internal airlines were asked to provide aircraft as simulated targets at night for the anti-aircraft searchlight crews in training. 'Panda' was selected for such duties; with virtually no night flying experience he was somewhat apprehensive. He had to fly a triangular course, each leg being about ten miles in length; these exercises lasted for about 2½ hours and were very boring. In 'Panda's view these flights were not that successful, and he generally had to put on his navigation lights to be recognised. On one of these flights the port engine came to a grinding halt. With his limited experience this was a state of dire emergency for Panda. Flying with his

right leg fully extended on the rudder bar in order to keep the aircraft straight for 45 minutes, he finally landed back at Weston after spending ten minutes making complete circuits of the field. On another occasion he had to fly to Land's End. 'Panda' queried the fact that there wasn't an airfield there. "There isn't one," he was told. "A chap will wave to you from the golf course when it's clear. You will land there." He subsequently landed successfully on a 600 yards strip.

Life certainly was pretty basic for the internal airline pilots of that era. Basically, it was a matter of following a map or a railway line. Regarding weather conditions, with no forecasts or actuals it was essentially up to the pilot whether he should operate his allocated service – which was quite a responsibility. Panda went on training duties during the war and, in 1946, joined such colourful characters as John Welford and Ron Gillman as part of the nucleus of early BEA pilots.

#### FIRST IMPRESSIONS – A WARTIME STORY OF IMPRESSED CIVIL AIRCRAFT – BY KEITH HAYWARD

Early in World War 2 many flying club and privately-owned aircraft in the United Kingdom were impressed into Royal Air Force service. Many of these machines were the pride and joy of private owners, a proportion of whom themselves joined the armed forces at the outbreak of hostilities. Some of the aircraft were quite light structures and could be vulnerable to the rough and tumble of service life. One such type was the Piper J-4A Cub Coupe. A two-seater, powered by a 65 hp Continental engine, the Cub Coupe was a popular American light aircraft which started to appear on the British register in 1939. These were some of the earliest aircraft to be impressed into RAF service. With the RAF they were used as station 'hacks' on communications duties between stations and also often flown by senior officers seconded on ground duties in order to maintain their flying hours. The aircraft certainly didn't receive the care and attention that they were used to in their civilian guise.



The Wiltshire School of Flying presented G-AFSZ to the RAF as BT440 in November 1940 and this aircraft served with 651 Squadron, 43 Officers Training Unit, 91GP and, finally, No.5 MU. After returning to civilian life in 1945 its post-war life was suddenly curtailed when, incredibly, G-AFSZ broke its back landing at Fairoaks on 30 May 1962. Fortunately, the owner pilot survived; it must have been quite a heavy landing!

Ipswich Aero Club owned several Piper J-4A Club Coupés. G-AFTB was commandeered in December 1940, initially by No.1 Ferry Pilots Pool and then by 1424 Flight as BV989. On 9 June 1942 the Cub made a jarringly heavy landing at Larkhill and the undercarriage collapsed. It was

considered a write-off. G-AFTC was similarly commandeered as BV990 and served with No.1 Ferry Pilots Pool and then by 1424 Flight, 42 OTU, 5 Group Comms Flight and RAF Bourn (Station Flight). G-AFTC was restored on 14<sup>th</sup> January 1946 but was then sold to France in November 1949.

Privately-owned G-AFTD also went to 1424 Flight in December 1941 as HL531 (out of sequence from its stable mates). However, its service life was short-lived. The Cub hit the ground soon after take-off from Larkhill Range and was declared a write-off after only 56.25 flying hours.

Another Ipswich Aero Club impressment was Piper J-4A Club Coupé G-AFVG (BV987). Used by Headquarters Service Ferry Flight at Kemble it only served until 6 April 1941 when high winds lifted the aircraft on to its nose whilst taxying and it was declared a write-off on 17<sup>th</sup> November 1941.

Another victim was G-AFVL (BT441) of Wiltshire Flying School, which went to D Flight, 651 Squadron. Suffering engine failure on take-off from a field at Ramridge, near Kimpton, Hants, the aircraft lost height whilst attempting to fly between two trees. Unfortunately, the Cub hit one of these trees and crashed. It was a write-off on 30<sup>th</sup> September 1941.

Piper Cub G-AFVM of Ipswich Aero Club was used by the Air Transport Auxiliary (ATA) at White Waltham. As BV988. Unfortunately, following engine failure on 23 June 1942 a heavy forced landing in a field near Shrewton, Wilts, proved too much for the airframe and it was declared a write-off. Wiltshire School of Flying's Cub G-AFWR became BT422, and was used by D Flight (of 651 Sqn) until it was written off following a heavy landing on steeply sloping ground at Winterbourne Stoke, Wilts, on 7 July 1941.

Other impressed Piper Cubs included G-AFXS (*see photo above*) which became DG667 and survived the war, whereas G-AFXV as BV986 served with the ATA but suffered a very dramatic incident at White Waltham on 25 October 1941 when it had an argument with Fairey Swordfish W5862 whilst taxying. The latter aircraft won the day and the Cub was declared a write-off on 18<sup>th</sup> April 1942.

These were some of the early civilian aircraft impressed into the Royal Air Force (and Royal Navy) service, and many more were to follow, including a number from Imperial Airways and British Airways Limited. They performed vital back-up for the RAF and Royal Navy during World War 2. Whether the original owners were equally impressed by the treatment received from the RAF concerning their beloved aircraft will never be known.

#### THE MOST DAMAGED RAF AIRCRAFT EVER TO LAND ON AN ENGLISH AIRFIELD IN WW2?

Seventy-five years ago, Adam Hunter's bomber pilot grandfather Andrew Wilson guided his crippled Handley Page Halifax Mk.III bomber of 51 Sqn back home to safety after an appalling mid-air collision near Paris. Ahead of VE Day 75<sup>th</sup> Anniversary, Adam tells the story of Flying Officer AL Wilson.

My grandfather could not sleep on the night of Saturday 13<sup>th</sup> January 1945. He had just piloted his crippled Halifax bomber serial MZ465 (*below*) back home to a safe landing on British soil, which had taken off hours earlier from RAF Snaith in East Yorkshire. That was no mean achievement. Just north of Paris, my grandfather's Halifax had collided with another Halifax bomber, from RAF Elvington, and grandfather's Halifax had incurred horrendous damage. It was later to be described as 'one of the most damaged RAF aircraft ever to land on an English airfield'. That night, after landing, he and the four other survivors of his crew were too hyped up to be able to sleep. "We just sat up together smoking," he once told me, in the understated fashion typical of his stories about the war.



At the age of 21, Andrew Wilson had flown nearly thirty missions to targets in mainland Europe. It was never easy, but that night's sortie to Saarbrücken on Germany's western border with France had been something else altogether. Photographs of the five survivors (below) standing in front of their plane leave you wondering how they could possibly have remained in the sky. About ten feet of the nose had been torn from the front, and wires, pipes and fuselage hang to one side. The navigator's station is crushed, and the pilot's flight deck exposed, open to the thin, freezing air. Nine feet of the nose was chopped completely off when the Halifax collided with another bomber, but it struggled back to this country with only three of its flying instruments still working, to make a perfect landing. Some of the skin on the nose was bent round and gave some protection against the wind which whistled through the aircraft as it flew home at 7,000 feet. But Flying Officer Wilson, of Leicester, and the rest of the crew were frozen as they struggled to keep the aircraft flying. The Navigator and the Bomb Aimer, neither of whom were then wearing their parachutes, had fallen out of the aircraft to their deaths at the time of the collision. The four engines continued to function perfectly after the collision, although the propellers were dented, probably by bits of wreckage which shook loose and flew off the fuselage. The radio was still working five minutes after the collision, but had to be shut off because of shorting; blue sparks were playing around the aircraft and there was a danger of fire. In that short five minutes, before the radio was cut off, the operator was able to send out an S.O.S. which was received in England. As a result, "Y-Yorker" was given special landing aids when it landed at RAF Ford, an emergency airfield. The intercom. was unserviceable as well as the A.S.I., the D.R. compass, and many other vital instruments for flying and navigation. "Y-Yorker" dived 1,500 feet after the collision, with the pilot struggling to gain control. He managed to do this and brought the aircraft up to 11,000 feet again. At this height it stalled, but he managed to keep it at 7,000 feet and at this height flew home.' In the photo below, the crew look tired, two of them visibly clutching cigarettes to calm their nerves. Wilson, tall and imposing in the centre, looks almost nonchalant. Reading accounts of that sortie today, I remembered him telling me about it as I sat on the floor next to his chair as an interested grandson in the late 1980s.



The mission had been 'uneventful and without incident' until just north of Paris, another plane from a French Sqn at RAF Elvington, flown by Edmond Jouzier, moved across their front and the two collided. In his report of the collision, French midupper gunner, Robert Memin, describes how the tail of his plane shattered with a huge crash as they began 'climbing, diving and turning' (the typical corkscrew manoeuvre used in Bomber Command to put off the aim of enemy night fighters). Realising the plane was out of control, Robert Memin bailed out, and eventually parachuted into a tree in front of the mayor's house in a tiny village near Gisors, Normandy, luckily in Allied hands by that time in the war. During his descent, he watched as his plane fall to earth and explode on the ground.

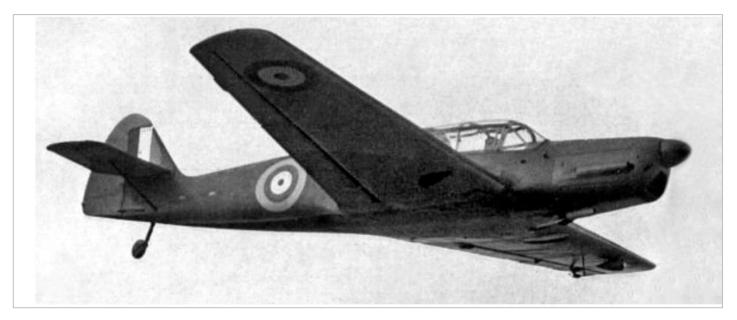
Listening to Wilson's stories as a child, the decision-making and clear-minded adherence to protocol needed to make it

home was hard to imagine. Only reading the official reports now does it come fully to life. Immediately after the collision, Wilson's Halifax had felt like it was 'falling around the sky', and he watched as the plane from Elvington seemed to 'hang in the air' beside them for eternity. But after regaining control, he followed his training. First, he checked the crew, noting simply that 'the Navigator and Bomb aimer had gone'. His friends, Stan Whitehouse and Dave Hauber, positioned as usual in the nose of the aircraft, had fallen to their deaths. Later, Wilson would visit the Normandy memorial to the two men and three French crew who also died. Next, the crew checked their equipment and instruments. All maps and charts were gone, all major instruments including their radios were 'useless' - sparks were flying from severed wiring. They switched off all electrics to guard against the risk of fire. Wilson noted: 'We were obviously in a bad way.' There were four remaining parachutes between the five airmen. Expecting to crash, he told his crew to evacuate. They refused. They climbed to save fuel and to give themselves 'a little time to think', but at what Wilson thought was around 11,000 feet the engines began to stall. The altimeter could not be trusted, and once the engines were restarted survival was their only goal. Wilson looked to the sky, not for spiritual revelation, but rather to find constellations that would guide them home. 'Having identified the North Star,' he reported, 'I flew North West until I estimated we were somewhere near Lincolnshire and started the Standard Distress Procedure.' The Distress Procedure required the pilot to circle until the ground control crew picked them up on radar and provided homing searchlights. It worked, but as he made his approach at RAF Ford (the nearest emergency airfield) in West Sussex and lowered their speed for landing the plane swung and vawed violently. They therefore had to go round again. This time, Wilson approached the runway low and fast, and landed safely.

Records of the time state that 'seldom if ever did an RAF aircraft land on an English airfield with more damage.' Weeks later, the entire Command received a memo about my grandfather, sent on behalf of Air Chief Marshal Harris – the famous 'Bomber' Harris. The memo reads: 'This Officer undoubtedly showed a very high standard of Pilotage and Captaincy in bringing his aircraft back to a base in the United Kingdom in its crippled condition. By his coolness and sound airmanship in adverse conditions he saved the lives of the remainder of his crew.' Later, Wilson and French gunner Memin, who survived the crash of the Elvington Halifax, formed a friendship. They wrote to each other regularly, exchanging photographs and stories. The letters from Memin ooze affection. Throughout, he writes to 'my dear Andy', inviting him to visit the family home in Poitiers when he next visits 'La Belle France'. In one letter, Memin referred to a model Halifax he had seen at a memorial in Normandy to the lost crew of his bomber. '*Brachet'* was the name written on the nose,' after the navigator who also died after the collision in 1945. The French navigator is described as 'a big devil, sculpted, with a coiffured slick hairstyle and straight forward look which speaks volumes. He was only 25 years old, but a true leader.' The author describes the captain's decision to remain on board with the French crew in theatrical fashion. 'Brachet... knows that the time has come to be great. Le Capitaine Brachet, your name will remain a symbol of the perfect air captain of the finest character.' Reading these lines, I wondered if these were simply the colourful flourishes of an author, and whether an account such as this would make it into a book this side of the Channel.

The understatement of our official reports, the Air Vice Marshal's letter, and Wilson's own descriptions of his actions feel curiously British. F/O Wilson's logbook entry for the flight reads, simply: "1945 Jan 13, Halifax III MH-Y, Ops. to Saarbrücken. collided nr. Paris. A./B. + Nav. killed. Landed (RAF) Ford." Looking, as I can now, at his Air Force Cross, awarded for an act of 'exemplary gallantry while flying', I can marvel at his cool airmanship and captaincy, and the leadership and courage he showed at only 21 years old. Perhaps Memin puts it best. Referring to a photograph that Wilson had sent him of the crew standing in front of the damaged plane, he wrote: "I appreciated the photos of your crew. They look very relaxed indeed. At this time of our life we were a happy and careless mess. I think our dangerous job could not be done without these qualities." *With thanks to Adam W Hunter, Daily Mai and Aircrew Remembered via LP Hayward* 

# A MESSERSCHMITT MESS – BY KEITH HAYWARD



Bob Hickox's recent article on the Messerspit, reminded me of a tail concerning a Messerschmitt at Croydon in 1939. In the 1930s some of the larger European countries maintained a communications aircraft in the United Kingdom for use by their embassies. Germany was one such country and they based their BF108B-1 *Taifun*, registered D-IJHW, at Croydon.

This aircraft was a modern four-seat touring aircraft which was considered quite advanced for its day, and it shared many features of the Bf109.

On 3rd September 1939 with war declared Croydon staff, including Imperial Airways engineers, were told that they were not permitted to assist in any way in the prevention of the removal of the aircraft from the UK. Early that morning Lufthansa engineers arrived to prepare the aircraft for take-off.

Mysteriously they found that a tyre had been punctured! A spare wheel was found and the mechanics proceeded with the replacement. Strangely they then found that a tyre valve had disappeared and off they went to find a replacement. While they were away, a huge packing case was lowered in front of the hangar doors very rapidly and the crane disappeared just as quickly. The Germans struggled to move the case out of the way and on returning to the aircraft found a six-inch nail was protruding from one of the tyres. This was the final blow as they had no spare wheels in stock. In despair the German team raced for their Lufthansa Ju52/3m transport and hurriedly left our shores.

Within a week two brave senior Royal Air Force officers arrived at Croydon to collect their prize and fly it to an RAF airfield complete with its Swastika and German markings. En route engine trouble developed and they force-landed in a field near the coast. With the engine cowling off the two RAF officers tried to locate the problem only to be captured by a keen British soldier who was on patrol in the area. Following a lengthy period of time trying to establish how a German aircraft was being flown by an RAF crew, the prize was finally delivered to No.10 Maintenance Unit, RAF, on 6 December.

D-IJHW became AW167 in RAF service (*see photo*) as a communications aircraft with the Station Flight at RAF Abingdon and, later, at Andover.

Another two civilian *Taifun* aircraft were also impressed into RAF service: G-AFRN became DK280 and G-AFZO became ES955 and the type name given was *Aldon*. Eventually at the wars end the RAF had fifteen such types on charge, most captured from the Luftwaffe. These civilian impressed aircraft often visited Northolt during the war on communications duties and young local aircraft spotters, such as myself, were initially quite confused when they appeared in the circuit. The *Aeroplane Spotter* magazine eventually identified them for us.

Credit Keith Hayward & Air Britain Impressment Logs.

#### FIRST OFFICER D A ROYSTON DAY – BSAA – "THIS CAN'T BE HEATHROW" – BY KEITH HAYWARD



Brought up in Wales 'Roy Day' as he was known, joined the Royal Air Force in 1942. Once qualified as a pilot he eventually joined a Lancaster squadron and completed 32 sorties over Germany. At the end of World War 2, like many of his contemporaries, he wanted to continue a career in aviation (He had been cashiered for flying a Lanc low over a Country Home late in WW2, so I guess he was not welcome anymore in the RAF). So he joined Silver City Airways as a First Officer on Lancastrians and flew a number of long-haul charter flights including several to Australia. This was very tiring work and, wanting a change, he eventually joined Cambrian Airways Charter Division. Ray couldn't have chosen a bigger contrast. He flew single pilot operations on Austers, Proctors and Rapides around the United Kingdom for

several months but then, once again, he felt he wanted a change. In 1948 he joined British South American Airways as a First Officer and rapidly completed his conversion training on familiar Lancastrians and less familiar Avro Yorks and Tudors. Once qualified he was allocated to the long West Coast route to Santiago operated by Lancastrians. He had to concentrate on his navigational skills as BSAA's policy was not to employ specialist navigators. Each pilot, Captain, First and Second Officers had to obtain a 1<sup>st</sup> Class Navigator's Certificate which was a challenge to most of them. While operating a BSAA route each pilot took turns to act as navigator on the many long sectors involved, thus sharing the workload.

Roy flew one service on the route; then the Berlin Airlift required extra crews to fly the new BSAA Tudors as bulk fuel carriers. Roy found this a very demanding operation but a great experience. By April 1949 he was back in the UK and was rostered on York freighters operating a weekly service to the Caribbean. On 4<sup>th</sup> June Roy was rostered with Captain Gosling on the route flying York freighter G-AGNN *Star Crest*. They set off from Heathrow and after a night stop in Lisbon departed for Dakar and then to Natal, Brazil, for a second night stop – a gruelling schedule. The next morning, they were off on a long ten-hour sector to Trinidad. En route one engine failed. Unable to maintain altitude they elected to divert to Georgetown, British Guiana, finally landing there after a flying time of nine hours 5 minutes. Luckily, they were carrying a spare Merlin engine for delivery to an outstation. However, the engineers who were required to change the engine had to position from Trinidad and Kingston, Jamaica, and this took time. Eventually, after a week, Captain Gosling commandeered the next freighter to arrive, Lancaster G-AGUM *Star Ward*, and flew back to London via Trinidad, Kingston and Nassau where they night stopped. Next morning, they continued to Bermuda, Gander, Azores and finally to Heathrow. The last sector had taken six hours 40 minutes and the total journey time was 18 hours 55 minutes. It had been a long day.

Early in August 1949 Roy was back on Tudors on the Berlin Airlift. Luckily, this amazing operation was coming to an end and on 10<sup>th</sup> August they all flew back to London. Roy had completed 143 trips during his two periods on the operation. On 19<sup>th</sup> August 1949 Roy was off again with Captain Murray Deloford, a pre-war junior Wimbledon tennis champion, flying York freighter G-AGNN *Star Crest* again. After a night stop at Santa Maria, Azores, they set off for Gander. In mid-Atlantic the starboard inner engine failed. Again, losing altitude they managed to limp into Gander. As before, they were carrying a spare engine for an outstation but this time they had several engineers on board who were being posted down the line. These poor chaps then had the job of erecting the engine on arrival in Gander and replacing the faulty Merlin. After a few days the job was done. Following a short test flight G-AGNN took off for the long journey home. After refuelling at Shannon, they left on the final leg for Heathrow. As they approached the UK coast Captain Deloford suggested that Roy set up an instrument let-down at Heathrow using BABS (Beam Approach System). Roy was proud of his instrument flying and readily agreed. They eventually selected their approach to Heathrow's runway 27 (as it was then) having passed over the Eureka Beacon (used in conjunction with the aircraft's instrument system). Unfortunately, due to extreme fatigue, Roy selected the wrong aerial. In fairness, they had been on duty for 24 hours and this was a period that required intense concentration.

Captain Deloford followed the pattern as instructed. Suddenly the First Officer shouted "Runway 45 degrees to the left." The captain slewed the aircraft round, but by then they were already over the runway and far too high. "Overshooting," he called. The First Officer informed the Tower. After a long pause the Tower replied "You may well be overshooting, but you are not overshooting Heathrow." Roy looked out of the blister window to see rows of DC-3s and Vikings below. They were over Northolt! They eventually landed at Heathrow with very red faces. After one more trip to the Caribbean the BSAA merger with BOAC was complete and Roy moved to Argonauts and, later, DC-7Cs, by now a Captain. Retiring in 1975, he died aged 89 in 2013– another aviation character of that era. BTW, Capt Deloford was later sacked by BOAC for drinking on duty not that it's suggested he was during the above incident. (**Credit**: *Aeroplane* and my Logbook research)

# DAY TOUR TO GREENLAND - BY FRED BARNES

Fred Barnes recalls a once in a life time experience on a day tour from Reykjavik, Iceland to Kulusuk, Greenland flying in a Flugfelag Islands Fokker 50.

In January 2001 my wife and I decided that we wanted to take a summer holiday in Iceland and after some research we decided to book a package deal with Icelandair Holidays which included staying at the famous Loftleidir Hotel at Reykjavik Airport. There were several tours on offer that could be purchased at additional cost but the most intriguing was the 'Day Tour to Kulusuk' which gave the possibility of a visit to Greenland.

On 10<sup>th</sup> June 2001 we flew from Heathrow Airport, London to Keflavik, Iceland in Icelandair Boeing 757-208, registration TF-FIV c/n 30424, and then went by coach on



the 45-minute journey to Reykjavik and the Loftleidir Hotel. At the front of the hotel across the car park was the visiting aircraft ramp, a hangar and I could see the aircraft on the ramp at the terminal building on the other side of runway 01/19. Then I noticed that the main runway 01/19 was closed for resurfacing work with many vehicles moving about and that runway 13/31 was in use. After a short walk a good vantage point for viewing aircraft and photography on runway 13/31 was located adjacent to the Airport Fire Station. Then it was time to walk the short distance into Reykjavik to look around and become a tourist.

#### **Delayed departure to Greenland**



On 11th June, after breakfast in the hotel, we excitedly prepared for the trip to Greenland and as per the 'Tour Notes' had

our walking boots, warm waterproof clothing, passports, Danish currency (Euros), and we added water, our cameras and some chocolate bars. Our tour would be for 4 hours in Kulusuk and would include walking from the airport into the village and return a total distance of just over 2 miles (6 km) and there would be no facilities to eat or drink other than at the small airport café. We set off for the short walk to the Reykjavik Airport terminal to check-in for Flugfelag Islands flight NY9231 at 1010 to Kulusuk and the weather was overcast, with little wind. At check-in we received our boarding passes and I noticed a large model of a DC-3 in old Icelandair livery hanging behind the desks. We sat down to wait for the departure gate to be announced.

Then the fog came down, visibility decreased and all flying operations were suspended at Reykjavik Airport.

After a while our flight was delayed for 1 hour and the passengers were given vouchers for a beverage and later a further 1-hour delay was announced and the passengers were beginning to be concerned that the flight would be cancelled. Around midday the fog started to clear and as the wind increased, visibility improved and a revised departure time was announced. When the flight was ready for boarding the passengers were taken through the international gate where passport checks were carried out and were then escorted along the ramp to the waiting Flugfelag Islands Fokker 50, registration TF-JMT c/n 20250, named 'Freydis'. I noticed the large six bladed propellers as we walked alongside the aircraft and boarding was by the forward integral stairs. Then we moved back through the cabin and took our seats on the starboard side next to the engine.

## **Reykjavik to Kulusuk**



When the aircraft was ready for departure each of the two Pratt and Witney PW-125B engines was started in sequence and there was a rumbling sound as each engine spooled up. There was an increase in sound when engine power was increased and the Fokker 50 started to move slowly forward, turned and then taxied towards runway 31 where it backtracked slowly along the runway to the end then turned through 180 degrees and came to a halt. Then the engines were set to take-off power, sound and vibration increased and when the brakes were

released the aircraft started to move forward slowly and then accelerated along the runway. It was a long take-off run but after rotation the Fokker 50 became airborne and the undercarriage was retracted. I could see Reykjavik from my seat but soon the green lowlands and snow-covered hilltops came into view as the aircraft continued climbing towards the western coastline of Iceland.

After reaching the top of climb the engine sound reduced as cruise power was set and the captain announced that the aircraft was flying at 12,000 ft. He also advised that the weather in Kulusuk was very favourable with good visibility, high level cloud and that the temperature was 6C. The Fokker 50 was now flying over the Denmark Strait, which is part of the Greenland Sea, and the cabin crew started the meal service. Later the flight climbed to 14,000 ft and subsequently to 18,000 ft as the fuel load lightened and the aircraft cruised along and the background sound of the drone of the engines could be heard in the cabin. The captain announced that the weather continued to be favourable in Kulusuk and that the passengers would get some good views of the stunning Greenland scenery on the approach into the airport. I thought that I had often seen the spectacular white glaciers and mountains when flying over Greenland from 31,000 ft but this would be the first time that I would get a real close up view of ice floes and even icebergs. Then I could see the coastline of Greenland ahead and it was time to get my camera ready.

As the coastline became closer, I could see ice floes and small icebergs in the sea and snow-covered mountains and valleys and then the engine power changed and the aircraft started to descend. Then the Fokker 50 was flying over barren rocky islands with many ice floes which had broken away from the main areas of pack-ice around Kulusuk Island. The aircraft was slowing down and then the undercarriage was lowered and I could see the landing gear clearly and the flaps were set for landing. Later in the approach the aircraft made a left turn and was then flying along a wide valley. After a few minutes I saw the shadow of the Fokker 50 on the ground in the sunlight and then the wheels alighted on to the gravel runway. There was a rumbling sound coming from the tyres and the aircraft was decelerating with normal braking and slowed to taxi speed. At end of the landing run the Fokker 50 turned off the runway and on to the gravel ramp and moved slowly forward and came to a halt in front of the small terminal building. The two engines were shut down and the flight time from Reykjavik to Kulusuk had been 1 hour and 45 minutes.

#### Visit to Kulusuk Village

After disembarking from the aircraft there was time for some photographs of the spectacular setting before walking across the gravel ramp into the modern looking terminal building where we were met by our local tour guide. There was no baggage to collect but a visit to the 'facilities' was necessary. Our group of 16 people was mustered by the tour guide who explained that we would still have our 4-hour tour and that the airport would stay open after normal operating hours to permit our return flight to depart. Local time in Kulusuk was 1 hour behind local time in Iceland and the guide reminded the group to take that into account during the tour. She apologised that the opportunity to take a dog sled ride into the village was not possible as the snow had melted on the track a few days earlier. She asked the group to keep together and there was also a strong warning that dogs in the village were 'WORKING ANIMALS NOT PETS' and should be kept at a distance. Then we set off along the track to the village amid the magnificent arctic scenery. I stopped to photograph the view of the airport and the mountain named Qalorujoorneq in the background.

There was the sound of a helicopter starting up and then the Air Alpha Greenland Bell 222UT, registration OY-HIA c/n 47529, took off from the airport in a cloud of dust taking interconnecting passengers on the short flight to Tasiilaq, the main town in the area, on the mainland. Our group continued along the gravel track with snow banks on either side and over a small stream with a wooden plank provided as a bridge. The air was clear with brilliant sunlight and after the helicopter had flown away there was silence. During the walk into the village the tour guide explained that the harbour was ice bound apart from a few weeks from mid-June to August when ships from the Royal Arctic Line could dock bringing fuel and other vital supplies to the inhabitants. The main method of travel in other months was by dog sled or snowmobile and there were a few vehicles but the price of fuel was extremely high.



On arrival in the small village we could see the colourful red, green and blue wooden houses, a general trading store and a Post Office. There were boys playing football in an open space and working dogs could be heard barking. Our tour included a visit to the small wooden Lutheran Church containing some remarkable stain glass windows, a visit to the local hall with a display of local dancing with drum music and time to walk around to take photographs in the surreal arctic setting.

There was an option to take a short boat trip amongst the ice floes and remains of small icebergs melting in the harbour. Fishing was important and there were many small boats and racks where fish could dry in the open air. The weather in Kulusuk had been as forecast sunny with actual temperature 7C, light wind but our walk would not have been so enjoyable had there been poor weather with rain, snow or strong winds.

Then it was time to walk back to the airport on a different track where we could see the Hotel Kulusuk, the main place for visitors to stay, the oil storage tanks and views of the village, harbour and mountains. Back in the airport terminal I asked the tour guide if it would be possible to visit the ATC Control Tower balcony which was at the end of the building as I wanted to get a photograph of Fokker 50 TF-JMT from the higher angle but sadly my request was not permitted. It was time for a visit to the 'facilities' before being given our boarding passes for the return flight NY9232 to Reykjavik. Then it was time to say thank you and goodbye to our tour guide before joining the other passengers walking out across the gravel ramp to board the aircraft.

#### Kulusuk to Reykjavik

I had a window seat on the starboard side of the aircraft just forward of the engine and was just settling in when one of the cabin staff arrived and much to my surprise said, "Mr. Barnes, the captain has invited you to the flight deck". In a moment I unbuckled my seatbelt, grabbed my camera and followed the stewardess forward into the flight deck. The captain welcomed me and introduced me to the first officer and asked "Would I like to remain on the flight deck for take-off", and I readily agreed. Then I was invited to take the extra crew seat behind and between the pilots and strap in and the captain then gave me a safety briefing and said that we could talk after getting airborne. The Fokker 50 had a 'glass cockpit' and although the flight deck was small it was ergonomically designed for pilot workload.

When all of the paperwork was checked and signed the dispatcher left the aircraft and TF-JMT was ready for departure. After contact with ATC, our callsign was 'Faxi 9232', the engines were started in sequence and there was the sound of each engine spooling up. When ATC gave taxi clearance the brakes were released and power was increased until the aircraft moved slowly forward. The captain taxied the Fokker 50 across the ramp and on to the runway and then slowly backtracked to the runway 29 threshold end. I could hear a rumbling sound as the tyres rolled along the gravel surface and at the end of the runway the aircraft was turned slowly through 180 degrees and lined up for take-off and brought to a halt. I looked ahead at the amazing sight of the runway, runway lighting, snow covered mountains, a wide valley and blue sky.

The pilots went through the Pre-Take-Off Check List and advised ATC that the flight was ready for departure and ATC advised the latest surface wind, temperature and pressure readings and cleared the flight for take-off. The flaps were set for take-off, an engine power check was carried out, the brakes were released and engines slowly increased to take-off power and TF-JMT started moving forward and accelerating along the runway. During the take-off run the vital V1 and VR speeds were called and then the Fokker 50 became airborne and after V2 when and a positive rate of climb was established the undercarriage was retracted. The aircraft climbed straight ahead and then started a gentle right-hand turn and continued climbing until the Fokker 50 was over the waters of the Ammassalik Firth and then levelled off at a safe



altitude. There was the magnificent panorama of the snow-covered mountains of Kulusuk Island and the Greenland mainland, ice floes in the green sea and blue sky with few clouds. Local ATC handed the flight over to Oceanic Control which cleared the aircraft to climb to FL170 and the aircraft headed east towards Iceland and out over the Denmark Strait.

After the Fokker 50 was in the cruise at FL170 the captain had time to talk and I briefly explained my airline background. He said that the flight from Reykjavik to Kulusuk carried return fuel to Keflavik or Reykjavik as diversion airports should the weather change and be below the high limits required for landing at Kulusuk due to the mountains in the area. Weather was a major factor on the route as

Kulusuk Airport could be affected by strong winds, snow, fog, freezing rain and low cloud throughout the year. If the weather forecast or airport conditions at Kulusuk were adverse then the flight was often delayed awaiting an improvement or cancelled. The Fokker 50 was weight limited with the uplift of extra operational fuel and a full payload of 50 passengers could not be carried westbound. Fuel at the airport was available but was extremely expensive and normally had to be pre-ordered and there was no hangarage in the event of technical malfunction of the aircraft. There was only minimal



accommodation for passengers in the event of a long delay. The aircraft also had to be equipped with HF radios and equipment for operation in Oceanic Airspace. He also explained that the route from Reykjavik to Kulusuk was just under 400 nautical miles (460 miles/735 km) and could be operated under the ICAO 60 Minute Rule for twin engine aircraft. The airstrip at Kulusuk had been constructed in 1956 by the United States government to service a nearby 'Distant Emergency Warning' DEW Line station but closed in 1991. Then the airstrip had been taken over and developed by the Danish Authorities and administered on behalf of the Government of Greenland. The single gravel runway '11/29' is 3,934 x 98ft/1,199 x 30 m.

The first officer checked with the captain before requesting a climb to

FL190 from ATC Oceanic Control in Iceland which was subsequently confirmed and the pilots increased the engine power to climb to the new cruising altitude. Then the captain said that the cabin crew had advised him that they were about to start the meal service and had requested that I return to my seat. I thanked the captain and the first officer for permitting my flight deck visit which was a rare experience.

After returning to my seat afternoon tea was served and I reflected on the day and that the weather at Kulusuk had been exceptionally good. The flight continued in the evening sunshine and the green and rocky coastline of Iceland came into view. Then the sound from the engines changed as the Fokker 50 started the descent into Reykjavik Airport. The aircraft was slowing down, then the undercarriage was lowered and engine power and flaps were set for landing. After a straight in approach TF-JMT landed smoothly on runway 13 at Reykjavik after a flight time of 1 hour and 45 minutes from Kulusuk. The aircraft slowed on the runway to taxi speed and then made a 180 degree turn to backtrack on runway 13, then turned on to the ramp at the terminal and parked on stand where the two engines were shut down. It was the end of a truly unforgettable day tour.

#### Flugfelag Islands (Air Iceland)



Flugfelag Islands (Air Iceland) had been formed in 1997 with the merger of Flugleidir, the domestic division of Icelandair, and Flugfelag Nordurlands. Domestic air services were provided in Iceland and international flights were operated to the Faroe Islands and Greenland from the city airport in Reykjavik. During my visit the operating fleet comprised four Fokker 50 (one had been leased and was painted all white with company titles in blue), three Swearingen Merlin, two Twin Otter and an ATR-42-300QC aircraft leased from Islandsflug. The aircraft were painted in an attractive all white livery with the titles FLUGFELAG ISLANDS in blue on the forward fuselage with a yellow and blue line sweeping along the rear fuselage and up the tail which included the company seahorse logo. The flag of Iceland was painted on

the aircraft with the individual aircraft registration in black and the underside of the fuselage was painted grey. Both of the Twin Otter aircraft were based in Akureyri.

The author would like to thank the Flugfelag Islands crew and the tour guide for a once in a lifetime experience to visit Greenland.







#### GREENLAND - 11<sup>TH</sup> & 12<sup>TH</sup> AND 15<sup>TH</sup> JUNE 2001

Photo Captions - Top to bottom in the article and left to right;

- 1. Kulusuk Airport Terminal Building and Control Tower
- 2. TF-JMT Fokker F.50 named Freydis (port side) at Kulusuk Airport, Greenland
- 3. Map of air routes Greenland Iceland
- 4. OY-HIA Bell 222UT of Air Alpha, Greenland Kulusuk Airport
- 5. Cockpit view of Kulusuk Airport, Runway 29 prior to take-off
- 6. Mountains and Ice floes over Ammassalik Firth from the flight deck of TF-JMT
- 7.TF-ELJ ATR42-300QC Reykjavik Airport, Iceland, leased from Islandsflug
- 8. TF-JMC DHC-6 Reykjavik Airport Iceland
- 9. TF-JMT Fokker F.50 (starboard side) Kulusuk Airport, Greenland
- 10.TF-JML Fairchild SA227-DC Metro 23 at Reykjavik Airport Iceland

#### Photo Credit; Fred Barnes.

#### THE DEATH OF WLADYSLAW SIKORSKI IN GIBRALTAR ON 4TH JULY 1943 - BY JOHN ROACH

In late February this year my wife, Sue, and I made a short visit to Gibraltar and visited Europa Point, the most southerly



point on mainland Europe, where we discovered a memorial dedicated to the air crash that resulted in the death of General Wladyslaw Sikorski, the commander-in-chief of the Polish Army and Prime Minister of the Polish government-in-exile.

On 4 July 1943, while Sikorski was returning to Hendon from an inspection of Polish forces deployed in the Middle East, his aircraft, a Royal Air Force Consolidated Liberator C II, serial number AL523, crashed into the sea 16 seconds after taking off from Gibraltar Airport at 23:07 hours. This Liberator C II was purchased and converted by the RAF for use as a transport and operated by 511 Squadron of RAF Transport Command (based, at that time, at Lyneham, Wiltshire), on long range flights mainly between the UK and Gibraltar. An estimated sixteen people died, including many other senior Polish military leaders. The plane's pilot was the only survivor.

#### *Left; The Liberator upside down in the shallow waters off Gibraltar. The fuselage was broken in half.*

The crash was ruled to have been an accident, but several conspiracy theories continue to persist. The crash marked a turning point for Polish influence on their Anglo-American allies in World War II. The relationship between the Soviet Union and Poland was tenuous at best during World War II for a variety of reasons, and became

more so, after the 1940 Katyn massacre of over 20,000 Polish servicemen by the Soviets came to light. However, pragmatic general Wladyslaw Sikorski was still open to some form of normalisation of Polish-Soviet relations, while general Wladyslaw Anders was vehemently opposed. To boost morale, Sikorski began a tour of inspection of the Polish forces stationed in the Middle East in May 1943, tending to political affairs where necessary.

In 1972, the Czechoslovak pilot, Flight Lieutenant Eduard Prchal (112323) (*Photo right*), described the events: "I received the green light from the tower and we began our take-off run. I pulled the stick back and the aircraft started to climb. When I was at 150 ft, I pushed the controls of the aircraft forward to gain speed. Suddenly I discovered I was not able to pull the stick back. The steering mechanism was jammed or locked." The aircraft then lost height rapidly. Prchal closed the four throttles and warned the others through the intercom "Attention, crash". The aircraft crashed into the sea. Sikorski, his daughter, Tadeusz Klimecki (his Chief of Staff), and eight other passengers were killed. While the official death toll included 16 fatalities, the exact number of passengers was not known (in 1943). Of the six crew members on board, only Prchal survived. Prchal was later interviewed several times about the crash. At least 16 passengers are now known to have been killed namely: -



General Wladyslaw – Commander-in-Chief of the Polish Army & PM of the Polish Government in exile Zofia Leśniowska – Sikorski's daughter
Major General Tadeusz Klimecki – Polish Army Chief of Staff to the Commander in Chief
Colonel Andrzej Marecki – Polish Army Chief of the 111 bureau (Operations)
Lt. Colonel Victor Jan Gralewski – an Armia Krajowa courier
Lt. Josef Ponikiewski – personal Aide-de-Camp to Gen Sikorski.
Adam Kulakowski – Personal secretary to Gen Sikorski.
Cazalet MC – Conservative Party MP for Chippenham, & British Liaison Officer to the Polish forces
Brigadier John Percival Whiteley OBE – Conservative Party MP for Buckingham
Walter H Lock - Ministry of War clerk.
Harry Pinder – Telegraphist

Sqn. Ldr Wilfred S Herring -- Second pilot.

W/O Lewis Zalsberg – Navigator. F/Sgt George B Gerry – Radio operator/Gunner. F/Sgt Dobson Hunter – Radio operator/ Gunner. F/Sgt Francis S Kelly – Mechanic.

Sikorski's body was collected by the Polish Navy destroyer ORP Orkan and transported to Britain. He was subsequently buried in a brick-lined grave at the Polish War Cemetery in Newark-on-Trent, England, on 16 July that year. Winston Churchill delivered a eulogy at his funeral. A memorial stone is located at the Powazki Military Cemetery, western Warsaw. The bodies of Sikorski's daughter and crew were not found. Sikorski's death marked a turning point for Polish influence amongst the Anglo-American allies. He had been the most prestigious leader of the Polish exiles and it was a severe setback for the Polish cause, for no Pole after him would have much sway with the Allied politicians.

#### British 1943 investigation

A British Court of Inquiry convened on 7 July 1943 to investigate the crash, following the order by Air Marshal Sir John Slessor of 5 July 1943. On 25 July 1943 the Court concluded that the accident was caused by the "jamming of elevator controls" which led to the aircraft being uncontrollable after take-off. The report noted that "it has not been possible to determine how the jamming occurred" although it ruled out sabotage. Slessor was not satisfied with the report and on 28 July ordered the Court to continue its investigation to find out whether the controls were indeed jammed or not, and if they were, then for what reason. Despite further investigation the Court was unable to resolve Slessor's doubts. The Polish government refused to endorse this report because of the contradictions cited therein, and the lack of conclusive findings.

#### Conclusions

- a) Liberator AL 523, total all up weight 54,608 lbs, took off from Gibraltar at 23.07 hours on 4 July 1943 bound for UK. The weather was fine, wind light, no cloud, visibility 10 miles. The aircraft was airborne after a run of approximately 1100 yards, climbed to about 150 feet in a perfectly normal manner and then gradually lost height, striking the sea, only 16 seconds after take-off, on an even keel approximately 1200 yards after leaving the ground. The evidence suggests that the pilot had throttled back a moment before impact and that his engines had been running normally up to that time. The pilot was recovered by the Station rescue dinghy within six minutes of the crash and was the sole survivor.
- b) b) The cause of the accident was, in the opinion of the Court, due to the aircraft becoming uncontrollable for reasons which cannot be established. The pilot, having eased the control column forward to build up speed after take-off, found that he was unable to move it back at all, the elevator controls being virtually jammed somewhere in the system. It is impossible, from the evidence available and examination of the wreckage, to offer any concrete reason as to why the elevator system should have become jammed." "The findings of the Court and the observations of the officers whose duty it is to review and comment on those findings have been considered and it is apparent that the accident was due to the jamming of the elevator controls shortly after take-off with the result that the aircraft became uncontrollable. After most careful examination of all the available evidence, including that of the pilot, it has not been possible to determine how the jamming occurred but it has been established that there was no sabotage. It is also clear that the captain of the aircraft who is a pilot of great experience and exceptional ability was in no way to blame.

#### **Conspiracy theories**

The political context of the event, coupled with a variety of curious circumstances, immediately gave rise to speculation that Sikorski's death had not been an accident, and might have been the direct result of a Soviet, British, or even Polish conspiracy. Some modern sources still note that the accident was not fully explained; for example, Jerzy Jan Lerski in his Historical Dictionary of Poland (1996), entry on the "Gibraltar, Catastrophe of", noted that "there are several theories explaining the event, but the mystery was never fully solved." However, as Roman Wapiński noted in his biographical entry on Sikorski in the Polish Biographical Dictionary in 1997, no conclusive evidence of any wrongdoing had been found, and Sikorski's official cause of death was listed as an accident.

#### Polish 2008 investigation

In 2008, there was investigation opened in Poland by Commission for the Prosecution of Crimes against the Polish Nation of the Institute of National Remembrance. Sikorski was exhumed and his remains were examined by Polish court experts, who concluded in 2009 that he died of multiple injuries consistent with an air crash, and possibly of drowning as an additional cause. The injuries occurred, while Sikorski was alive. There was categorically excluded a possibility, that Sikorski was shot, strangled or stabbed. Tadeusz Klimecki, Andrzej Marecki and Józef Ponikiewski were exhumed as well, and their injuries were of similar nature. Thus, theories that Polish delegation was murdered before the incident were ruled out. However, they did not rule out the possibility of sabotage, which was still being investigated. On 30 December 2013 the Institute of National Remembrance closed the investigation on a basis, that the evidence is not enough to confirm, nor to exclude a sabotage.

#### Attempted explanations for the air crash

In 2012, Jerzy Zieborak revisited the evidence gathered by the Court of Inquiry in 1943 as well as other material that has been made available to date. His conclusion was that the accident resulted from the combination of factors. Firstly, the aircraft was overloaded and its centre of gravity was displaced beyond the permissible limit. Secondly, the aircraft speed at take-off was too low due to the excessive weight. Finally, the autopilot was switched on just after the take-off – contrary to the flight manual – and that caused an effect similar to the controls' jamming as seen by the second pilot. Evidence has been found that the surviving pilot Eduard Prchal did perform the second pilot's duties during the take-off, which he did not reveal at the time of the investigation. Zieborak rejects General Nöel Mason-MacFarlane's opinion that Prchal's mental state during the take-off was the reason for the accident. He then compares Prchal's article written ten years after the accident with the relevant documents from the accident. Not only did Prchal write an untrue description of the accident, but he omitted some details he had earlier mentioned during his meetings with pilots. The differences included details of his injuries mentioned in the article and those reported in the medical examination after the accident. The author considered whether it was possible that Prchal had completely forgotten such details of the accident as for example the number of victims. The reason for these differences, i.e. whether Prchal lied deliberately in his article or suffered from a type of partial amnesia as a result of his injury is not discussed. Zieborak thinks that Prchal lied on purpose about the Mae West lifejacket. Despite the deficiencies of the report, the results of the Court's investigations were finally accepted. The author concluded that this was a convenient solution for both the British and Polish government, as the details of VIPs' flight procedure could not be published in the Court's report during the war.

In 2016, a pilot and researcher, Mieczysław Jan Różycki also undertook the analysis of the Gibraltar crash and accompanying circumstances. He agreed, that the aircraft was overloaded and its take-off weight significantly exceeded the limit set by the manufacturer and RAF Transport Command. Violation of weight regulations was, however, tolerated due to war difficulties in transport and pilots were encouraged to take responsibility for flights with overloaded aircraft. Moreover, minor smuggling of scarce goods by flying personnel was widespread and the baggage of important passengers was not checked nor weighted at all. Therefore, pilots had to estimate the weight of the aircraft. The investigation assumed, basing upon RAF form, that the weight of the load, including passengers, was 5324 lbs, which led to the conclusion about a take-off weight. According to M. Różycki, however there are strong indications, that the form containing such a weight was fabricated by the commission to assume the absence of excessive overloading of the aircraft. According to this author, based on estimates and comparative data, the actual take-off weight of the aircraft was about 63,000 pounds, and it needed over 1600 yards to take-off, which was more, than 1530-yard strip available in Gibraltar at that time. Only in August 1943 the new 1,800-yard strip was completed. Moreover, the main problem at this airport was bad weather conditions due to the mountainous environment, sea influences and winds, and accidents were often there, including two other Liberators in 1942 and 1943.

Eduard Prchal himself was an average pilot, and in particular he was not an experienced pilot of heavy transport machines. He was a fighter pilot first and began training on Liberator only on December 22, 1942, and flew 292 hours and 10 minutes on this type until the accident. Co-pilot Stanley Herring, although an experienced bomber pilot, had no experience in solo piloting the Liberator. On the other hand, Liberator aircraft were difficult to fly and did not tolerate errors, which resulted in a considerable accident rate during training. In addition, individual aircraft of the first two production series AL and AM had specific flight properties. Both Prchal and Herring did not know AL523 aircraft well, and they made only one daytime take-off and flight from Cairo.

Prchal himself was not Sikorski's personal pilot, but Sikorski flew with him for the first time from England to Cairo, and expressed a wish, that he would pilot an aircraft on a way back too. As a result, Prchal was assigned to Liberator AL523, scheduled for return trip. A plan of Sikorski was to use his trust in Czechoslovak pilot for propaganda, to improve harsh relations between Polish and Czechoslovak governments in exile. After taking off too early, the aircraft started to lose height, and Prchal may have had an impression of jammed elevators indeed, due to a gust of wind. The aircraft then came to a stall and crashed within sixteen seconds from the take-off. In conclusion, the accident, according to M. Różycki, was a simple disaster caused by taking off from an airfield with an unfavourable weather configuration, insufficient strip length and on overloaded machine - apart from Liberator's flight characteristics, increased difficulty of night take-off, moderate pilot experience and lack of knowledge of this particular aircraft's characteristics.

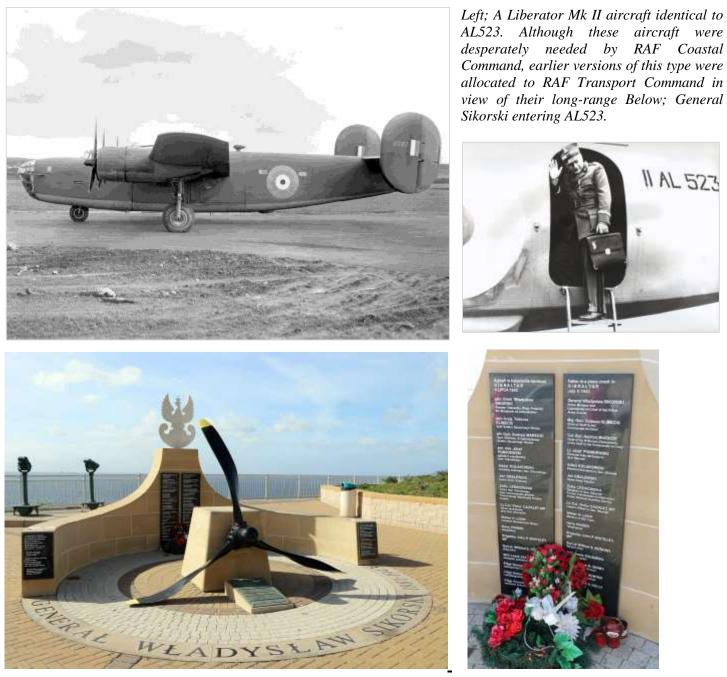
According to M. Różycki, a primary goal of British Court of Inquiry was to investigate a possibility of sabotage in Gibraltar, which was of vital importance to other allied commanders and politicians. This issue was investigated most thoroughly and the sabotage was ruled out. Therefore, less important was a determination of real accident cause. In the opinion of M. Różycki, the final conclusion, that the accident was caused by the jamming of elevator controls of unknown cause, was deliberate understatement, in order not to blame the pilot, which could have strained Polish and Czechoslovak relations - and on the other hand, not to reveal negligence in transport pilot training and procedures, for which RAF was responsible.

### Libel case

In 1967, Rolf Hochhuth, a German playwright, included one theory of the 1943 crash in his play Soldiers: An Obituary for Geneva. Here it was an 'accident' initiated by Winston Churchill who had instructed the British Secret Service to make the necessary arrangements. Unaware that Prchal was still alive, Hochhuth accused the pilot of participating in this plot. A libel case resulted and a court in London found in favour of Prchal and awarded him substantial damages and costs (£50,000). Hochhuth moved to Switzerland and avoided the payments. The London theatre staging the play agreed to out-of-court compensation.

# History of Liberator Mk II serial AL523

Construction number 21; handed over at Dorval 16.10.41; Dorval - Gander 27.10.41, Gander - Scottish Aviation Limited, Prestwick 28.10.41; to Royal Aircraft Establishment Farnborough 25.11.41; RAE - SAL 11.5.42; service pilot for special trials 23.5.42 SAL to RAE; returned to SAL for transport mods 23.5.42; to 511 Sqn 29.11.42; crashed into sea after take-off from Gibraltar 4.7.43, killing General Sikorski, premier of Polish government in exile. Credit: Wiki and numerous internet sources.



The memorial and plaques commemorating those killed in the crash off Gibraltar on 4th July 1943

# **KEITH'S 90TH BIRTHDAY CELIBRATION AT THE BA HERITAGE CENTRE**



Jim kindly sent in a selection of photos that should have been sent in to Airwords last year showing the celebrations held at the Heritage Centre for Keith's 90<sup>th</sup> Birthday. Incidentally, on 19<sup>th</sup> November 2020, Keith will have reached his 75<sup>th</sup> Anniversary of his association with British Airways (including associated airlines of BSAA and BEA).

## DE HAVILLAND COMET – THE WORLD'S FIRST JET AIRLINER – BY PHIL BIRTLES



With Britain concentrating on combat aircraft during WW2 and American still developing transport types, there was a need for Britain to consider competitive airliner development for the post war period. As a result, the Government formed the Brabazon Committee to study future air transport requirements. Headed by Lord Brabazon of Tara, one of Britain's aviation pioneers, in addition to Government representation, leaders of the aircraft industry were also invited to attend. Amongst the aircraft studies the Brabazon Type IV specification issued in May 1943 called for a transatlantic jet powered mail plane. After a number of potential layouts were considered, including a tailless configuration, it evolved into a more conventional design. This comprised low slightly swept back wings on a

conventional fuselage with the engines buried in the wing roots. The fuselage was a tubular aluminium construction with pressurisation to maintain passenger comfort when flying above the weather at up to 40,000 feet. This gave smooth flying conditions, low cabin noise and an overall comfortable flight.

The Ministry of Supply ordered two production prototypes at a fixed price to allow development to start. The challenge was probably equivalent to the Concorde programme two decades later, but it was believed the required technology advances were well understood. Considerable structural and systems testing was undertaken by de Havilland with a decompression chamber for testing at simulated high altitude, and water tanks were installed to test pressurisation loads. When a structural test specimen passed its initial test, the loads were doubled to ensure adequate margin. An Airspeed Horsa II nose was replaced by a mock-up Comet nose and towed around behind a Halifax, to check for rain clearance and overall pilot visibility. A nose-wheel steering rig was used on a lorry chassis with Mosquito main undercarriage outriggers. Two Lancastrians has outboard Merlins replaced by Ghost engines to flight test endurance, and were capable of powering the converted bomber with the other two Merlins stopped. For high altitude testing Vampire TG/278 was re-engined with a Ghost in place of the Goblin, and with extended wing span attained a height record of 59,446 feet on 23 March 1948 flown by John Cunningham, the chief test pilot.

The original concept for the Comet had been to power it with Rolls-Royce Avons, but civil certification was delayed, requiring substitution by the less powerful de Havilland Ghosts. With the reduced power, it was necessary to keep structural weight to a minimum and use the thinnest possible aluminium fuselage and wing skins. Also, to save weight Ciba Geigy developed metal to metal Redux bonding to fasten many of the skins.

In 1946 and 1947 orders were placed by BOAC for eight Comets and British South American Airways for six aircraft. When these two airlines merged, the combined order was confirmed as 14 Comet 1s at a fixed price with performance and delivery dates guaranteed. The final total of Comet 1s delivered to BOAC was ten aircraft, to be followed by up to 15 Avon powered Comet 2s. The Comet 1 was therefore in effect an interim type to be used to introduce the jet airliner concept into service and develop operational procedures and route structure, pending delivery of the Comet jet airliner family.

The first Comet prototype was built in great secrecy in the Hatfield Experimental Department while production jigs were being set up in the main Erecting Shop, where Mosquitos had been built during WW2. Following engine runs and compass swing, John Cunningham took the Comet up for its first flight on 27 July 1949 – his birthday, and also of Sir Geoffrey de Havilland. Initially Carrying the class B registration G-5-1 for early test flights, it was registered G-ALVG for overseas flights including hot weather trials at Khartoum, and wherever it flew, new point to point speed records were established. The prototype was also tested with a pair of de Havilland Sprite rockets located between the Ghost engine exhausts to boost hot and heavy weight take-offs, but never used in practice. The Comet prototype was first shown publicly at the SBAC Display at Farnborough in September 1949, and appeared the following year in full BOAC colours.

The first Certificate of Airworthiness for a jet airliner was achieved on 22 January 1952 with initial delivery to BOAC of G-ALYS on 31 January. Following crew training and route proving, the world's first jet commercial jet service took off from London Heathrow on 2 May 1952 heading for Johannesburg. A year later, on 2 May 1953, Comet 1 G-ALYV was *(photo above)* lost in a violent storm after take-off from Calcutta with all on board lost. The investigation exonerated the Comet as the storm was so violent the structure was unable to survive the loads. As a result, priority was given to the development of weather radar in all airliners, which is now standard. Then on 10 January 1954 BOAC Comet 1 G-ALYP was lost off the coast of Elba after take-off from Rome. A number of precautionary modifications were made by de Havilland and services restarted with the approval of the Air Registration Board (ARB). Sadly, on 8 April 1954 G-ALYY was also lost off Stromboli in similar mysterious circumstances, resulting in the CoA being withdrawn and all passenger operations being grounded.

The resulting accident investigation led by RAE Farnborough, was the most comprehensive ever, with wreckage of G-ALYP recovered from the sea bed at a greater depth than achieved before. A complete airframe was immersed in a water tank where it was subjected to flight loads, and another Comet 1 was flown by John Cunningham and Sqn Ldr Roger Topp to check for structural flutter. It was found that the Comets had suffered from metal fatigue, but de Havilland was in no way held to blame. They had complied with all the known airworthiness standards, but the major lesson learned was that static structural testing was insufficient, and that dynamic testing was vital.

Comet 1A exports before the accidents were three to Air France, three to UTA, two to Canadian Pacific and two to the RCAF. One of the CPA aircraft, CF-CUN crashed on its delivery flight during take-off from Karachi killing the crew. The cause of the accident was found to be the aircraft nose was pulled too high on the ground and it was stalled, running off the end of the runway. To avoid this happening in the future, the wing leading edge was 'drooped' slightly and all jet airliners have to prove that they can take-off with the tail scraping the runway. This was a characteristic of jet airliners, as propeller driven aircraft had lift created over the wings by the propeller wash, which was not present with jet exhausting to the back. Following the Comet accident investigation, the three Air France Comets were returned to Britain, one of which is a major exhibit at the de Havilland Aircraft Museum, still featuring the square windows, which were the source of the fatigue cracking. The three UTA aircraft were scrapped, the surviving CPA Comet 1A joined BOAC, and the two RCAF Comet 1As had their cabins strengthened and returned to service.

Meanwhile Comet G-ALYT had been converted to the prototype Comet 2 powered by Rolls-Royce Avon turbojets, and was first flown by John Cunningham on 16 February 1952. The first production Comet 2 for BOAC was first flown on 27 August 1953, but was not delivered to BOAC. Fifteen were completed, mainly serving with 216 Squadron RAF based at Lyneham. Three were delivered to 51 Squadron for electronic intelligence operations with reduced pressurisation, and two more were fitted with the Rolls-Royce Avon RA 29 engines in the outer positions which were to power the ultimate Comet 4 series.

Comet 3 G-ANLO with a fuselage stretch and pinion fuel tanks on the wings, was flown for the first time by John Cunningham on 19 July 1954 and became the aerodynamic prototype for Comet 4 development. The Comet 3 was the first jet airliner to circumnavigate the globe in December 1955. The Comet 3 later became the 3B with the shorter span wings of the Comet 4B for BEA, and was then used in Autoland development at RAE Bedford for the Trident.

The ultimate airliner development was the Comet 4, 19 of which were ordered by BOAC, with G-APDA making its first flight from Hatfield by John Cunningham on 27 April 1958. The first two were handed over to BOAC at Heathrow on 30 September 1958 and inaugurated the first jet transatlantic service between London and New York on 4 October 1958, beating PanAm with the Boeing 707 by three weeks.

Comet 4s were sold to Aerolineas Argentinas, as an initial batch of three, and then added three more when two were lost in accidents. East African Airways ordered two to the same specification as BOAC. The short-range high-density Comet 4B with longer fuselage and short span wings was operated by BEA and Olympic. The intercontinental Comet 4C with the long-range wings of the Comet 4 and stretched fuselage of the 4B was the main export version, operated by Mexicana,

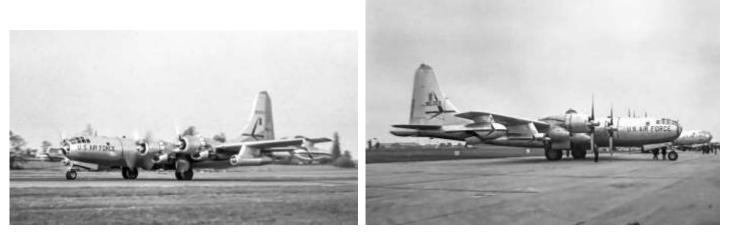
United Arab Airlines, Middle East Airlines, Kuwait Airways and Sudan Airways. The RAF ordered five Comet C.4s for 216 Squadron and the world's first jet airliner conversion to a VIP jet was SA-R-7 for King Saud of Saudi Arabia. This Comet was lost when it hit the top of an Alpine mountain on 20 March 1963. One Comet XS235 'Canopus' was ordered for the development of navigation systems, particularly over polar regions and operated by A&AEE and retired to Bruntingthorpe on 30<sup>th</sup> October 1997, the last flight of a Comet. Many of the world Comet fleet was acquired by Dan-Air either for inclusive tours or spares, G-APDB making its final flight to Duxford on 12<sup>th</sup> February 1974.



The ultimate development of the Comet was the Nimrod maritime reconnaissance aircraft, two development aircraft being converted from the last two unsold Comets on the production line at Broughton. Development was undertaken by Hawker Siddeley Aviation at Woodford and the type was not only used for maritime reconnaissance but three were produced for electronic intelligence gathering by 51 Squadron, replacing Comet 2Rs. Some Nimrods were converted to the AEW.3, but due to cost overruns and technical difficulties, they were scrapped and Sentries ordered from Boeing. There was an attempt to update the Nimrod to MR.4 standard using the existing fuselages fitted with new wings and engines. Once again technical problems caused massive cost overruns and the project was cancelled in 2010. Ten years later the gap in Britain's maritime air defence is being filled by the Boeing 737 based Poseidon.

# PETER FRAENKEL'S PHOTO ALBUM

Peter Fraenkel kindly answered my call for photos from member's photo albums, to share with everyone in Airwords. Peter explained that the early photos were taken with a very primitive camera, akin to one that used the end of a milk bottle as its lens. However, I think Peter is being too hard on himself and those photos shown below, make a really interesting page of long forgotten USAF aircraft types at Wethersfield AFB in the early 1960s. More photos to follow in future issues!



A couple of Boeing B-50s seen circa 1961, at Wethersfield AFB in the UK. Note the additional jet engines and wing tip fuel tanks, that were added to give this inproved B-29 design, the extra range and service ceiling it needed in the Cold War.

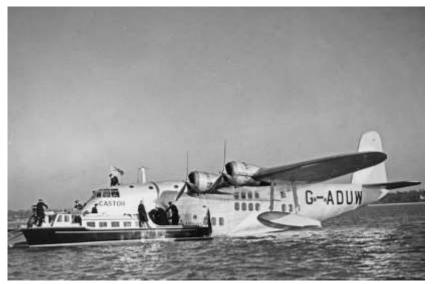


Above Left; A Boeing B47 seem at Wethersfield AFB in 196, was a six engined bomber that first flew on 17<sup>th</sup> December 1947 and stayed in first line service till 1969, and was superseded by the B52. Above Right; The Douglas B66 Destroyer was a development of the USN Douglas A-3 Skywarrior that first flew in 1952, and was the USAF version used as a medium bomber as the B66 or a dedicated photo reconnaissance model, designated RB-66.



Above Left; The Republic F-84F Thunderstreak was an American-built swept-wing turbojet fighter-bomber. The F84 entered service in 1954, retired from the USAF ANG in 1972 but Greece AF retained theirs till 1991! Above Right; The F101 Voodoo. Initially designed by McDonnell Aircraft as a long-range bomber escort (known as a penetration fighter) for the USAF's Strategic Air Command (SAC), the Voodoo was instead developed as a nuclear-armed fighter-bomber for the USAF's Tactical Air Command (TAC), and as a photo reconnaissance aircraft based on the same airframe

### REG ELLIS - FLIGHT CLERK TO BEA CAPTAIN (AFTER A WET START) - BY KEITH HAYWARD



On 12<sup>th</sup> September 1937 Imperial Airways 'C' Class flying boat G-ADUW *Castor* operating flight IE583 took off in a cloud of spray from Southampton Water bound for Alexandria via Marseilles and Rome. The en-route forecast was not good with storms predicted. *Castor* climb quite high to avoid the worst of the weather and it was cold. The aircraft was unable to alight at Marseilles due to the adverse weather and diverted to nearby Berre. They had to wait there for 1½ hours for the joining mail, destined to the Middle East and beyond.

Young Flight Clerk Reginald Ellis, already feeling a bit under the weather with the turbulence, apologised to passengers for the delay; soon they were on their way to Rome. By now the weather

was worsening and the approach to Rome at Lake Bracciano was very uncomfortable as the area was experiencing a violent storm. *Castor* hit the water hard. The port wingtip float sheared off on the port wingtip; aileron and flaps were damaged. The Captain immediately ordered the First Officer, Radio Officer and Reg Ellis to climb up onto the starboard wing to balance the aircraft and thus ensure that the port wing did not become submerged without the support on the wingtip float.

Several passengers also clambered up onto the starboard wing to add extra weight out by the wingtip. As they did this the weather worsened and the heavens opened. All involved were soaked as they struggled to stay on the wing. It took about 15 minutes before the aircraft was moored and passengers and crew were able to disembark. Some three hours later Reg Ellis, by now feeling far from well, was able to change out of his ruined uniform.

The next day a replacement flying boat, G-ADVD *Challenger*, arrived from Southampton to take the service on to Alexandria. Reg met the aircraft on arrival and helped to transfer the onward load from the delayed *Castor* before they continued to Alexandria.

Luckily the weather had improved and no further problems were experienced. In conversation with two of the passengers Reg was informed that both of them had noticed that the port wingtip float and wingtip and both gone under the water when they took off from Marseilles which would indicate that the float was already weak.

At the outbreak of World War II Reg joined the Royal Air Force and trained as a pilot. He then continued his service as a Flying Instructor. After the war he returned to the airline – by now BOAC – and flew for the European Division which became BEA on 1 August 1946.

He was a familiar figure at Northolt and well known for being a most fastidious character. He would often delay a departure if the state of the cabin did not meet his approval.

I well recall attending a Traffic Course during my BEA days when Captain Ellis talked to us about Flight Operations. Immaculate in his uniform he was constantly flicking any suspected speck of cigarette ash etc from the lapels as he spoke – most disconcerting! A BEA colleague John, a former steward, who was also very fastidious and somewhat sensitive, told me of an embarrassing encounter he had during his Viking days. Rostered with Captain Ellis, John went to great lengths to ensure that the cabin was immaculate before the rest of the crew arrived. When Captain Ellis arrived, he boarded the Viking barely acknowledging John, let alone congratulating him on the state of the cabin. He just stood inside the doorway with his back to John, expecting him to remove the master's greatcoat. John was not impressed and stood his ground, not considering this was part of his normal duty. After a minute or two John reluctantly removed the coat from Captain Ellis's shoulders and stowed it in the cloakroom. Not a word had been said.

Reginald Ellis had certainly progressed well from pre-war Flight Clerk with Imperial Airways to Senior Captain with BEA. His service included a spell with Gibair operating the short cross-Mediterranean routes to Tangier and other North African destinations, thankfully negotiating the Mediterranean more comfortably than he had in 1937.

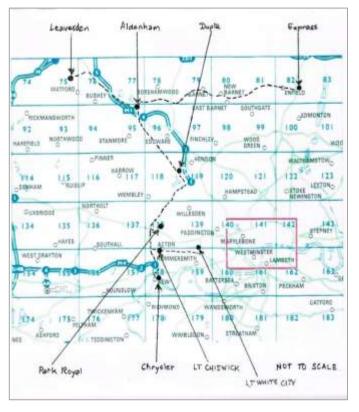
#### THE LONDON AIRCRAFT PRODUCTION GROUP (LAPG) - BY BRIAN A L JONES



When reviewing Britain's industrial output during the Second World War, one can only marvel at what was achieved in a non-digital age. The management, coordination and logistics required to bring sophisticated programmes to timely completion, I believe would be difficult to emulate even in today's computerised world. A subject of that observation is the London Aircraft Production Group (LAPG) which was led and coordinated by the London Passenger Transport Board (LT) between 1940 and 1945 to produce Handley Page Halifax heavy bomber aircraft. The other members of the Group were: Chrysler Motors Limited, Duple Bodies and Motors Limited, Express Motor and Body Works and Park Royal Coachworks.

As may be seen on the following sketch map, it is noteworthy that all of the selected companies were situated on or close to main roads in

the north and north west of London, with the exception of Chrysler, whose factory was just south of the River Thames at Kew. This was no doubt an important consideration as all the components, some sizable, would need to be moved by road to Leavesden Aerodrome for assembly. Until the latter stages of the War, when V-1 and V-2 weapons became a menace, those areas were less liable to enemy attack, than East and South London.



#### Location Map of the Participants in the London Aircraft Production Group

Under the Chairmanship of (LT's) Lord Ashfield (1) LAPG would eventually provide an organisation capable of completing one aircraft per hour, delivering 710 Halifaxes before production terminated in April 1945, out of a total of 6,176 built overall. Beyond the companies in LAPG, there were 600 sub-contractors and, in total, 51,000 employees (more than 50%) female were engaged in the construction processes. The Halifax was initially designed and built by Handley Page, with the prototype making its first flight on 25 October 1939 at RAF Bicester. The first operational aircraft was handed over to 35 Squadron at RAF Leeming on 23 November 1940. Although it had been preceded into service by the Short Stirling, which was the RAF's first four engine heavy bomber, the Halifax was the first four engined RAF type to bomb Germany, when, on the night of 12-13 March 1941, Hamburg was raided.

Production was ramped up quickly, with, in addition to LAPG, English Electric at Preston, Fairey at Stockport and Rootes at Speke all mass produced the Halifax. I have selected a range of photographs from the large number available to try and show the contribution of each company in the LAPG consortium to the scheme. While most photos are obviously carefully posed, they illustrate some interesting working practices that would

almost certainly raise health and safety issues today! The views also confirm the major participation of female workers and that most workshops were artificially illuminated at all time, due to the need to maintain blackout conditions.

While **London Transport** had no previous experience of aircraft construction, they were able to provide strong management and engineering leadership. LT could also offer a new factory like building that had been constructed to stable and maintain underground trains for the planned Northern Line extension from Edgware to Elstree, which had been under construction but deferred following the outbreak of war. Located at **Aldenham** <sup>(2)</sup>, near Elstree, it had the added advantage of a location alongside the Watford by-pass, which directly connected it to Leavesden Airfield, located a relatively short distance away, where final assembly and dispatch of the Halifaxes could be achieved.



Above Left; A WWII view of the Aldenham Works, with a selection of workers cars parked nearby. These would have been for management with a need for petrol coupons. Above Right; Aldenham – the assembly line for aircraft centre sections, with outer skins being applied. Below Left; Halifax nose sections being fitted out internally at Aldenham



LT's Chiswick Works and White City Depot also contributed components for the aircraft. Chiswick, which was largely given over to army tank design and production under the direction of LT's Chief Mechanical Engineer AAM (Bill) Durrant contributed detail parts for use in the assembly of centre sections and front fuselages that were sent to Aldenham.

At the White City Complex, LT used buildings for the construction of Halifax engine cowlings and storage of components and spare parts, Other component parts were assembled in the subway which linked Earl's Court Station to the Exhibition Hall on the other side of the road.

The **Chrysler Motors Limited**, Kew Works was approached by an entrance drive from Mortlake Road. Chrysler's factory was used pre-WWII, for assembly of the Chrysler passenger USA and also the construction of Dodge trucks.

cars from completely knocked down kits imported from the USA and also the construction of Dodge trucks.

**Duple Bodies and Motors Limited** produced 750 front fuselage sections (including all of those fitted to the LAPG's 710 Halifaxes) in their works located on the east side of Edgware Road at the Hyde, Hendon. The available Duple workshop photos are all shown devoid of staff – perhaps they have moved next door to produce the bus bodies that Duple were constructing at the same time due to wartime utility standards.



Above left; LT's Chiswick Works. Above Right; LT's the White City Complex, with adjacent railway sidings



Above Left; The Chrysler Motors Limited, Kew Works. Above Right; The Chrysler Motors paint shop, with a complete rear half of a Halifax fuselage in place for painting.



Above Left; Duple Bodies and Motors Limited works was located on the east side of Edgware Road at the Hyde, Hendon. Above Right; The available Duple workshop photos are all shown devoid of staff – perhaps they have moved next door to produce the bus bodies that Duple were constructing at the same time to wartime utility standards.



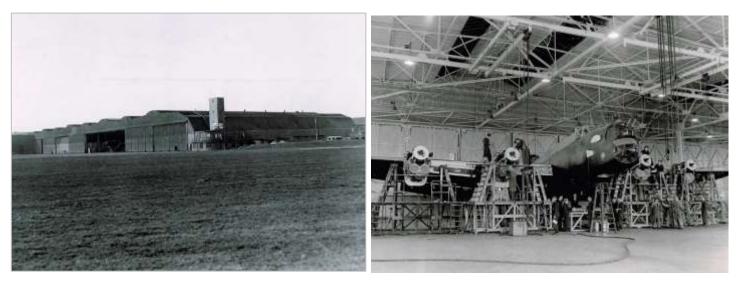
Above Left; The Express Corner premises had only been open since October 1938 and provided 110,000 square feet of floor space, which included a state-of-the-art woodworking complex. Their peace time speciality had been the construction of cab units for commercial vehicles. Above Right; A busy day in the Express Motor & Body Works.

Express Motor & Body Works was at Express Corner; the junction of Great Cambridge Rd & Southbury Rd, Enfield (4).

**Park Royal Coachworks** in Abbey Road, Park Royal was selected to produce outer wings and engine cowlings. The Company, which was LT's preferred peace time supplier of bus bodies, also produced bodies for around 16,000 military vehicles and utility bus bodies during the wartime period.



Above Left; Park Royal Coachworks in Abbey Road, Park Royal. Above Right; Two young ladies assemble a Halifax wingtip, using pneumatic and hand drills. Surely the workpiece would normally be supported in a jig?



Above Left; A general view of the main assembly hangars at Leavesden Airfield. Above Right; Final assembly of a merlin engined Halifax underway in a Leavesden hangar.

**Leavesden Airfield** – final assembly of the Halifax aircraft was undertaken in hangars from major assemblies which had been transported to the site on low-loader trailers. Former playing fields had been acquired by the Air Ministry in 1940 for the construction of a three-runway airfield. In addition to Halifaxes by LAPG, the site was used by the Second Aircraft Group for the assembly of de Havilland Mosquito aircraft.



#### Celebration – The Handover Ceremony for the Final LAPG Produced Halifax.

On 16 April 1945, Lord Ashfield presided over the handover to the RAF of Halifax Mk. III serial **PN460** at Leavesden airfield. The demonstration flight was flown by T W (Sammy) Morton, Chief Test Pilot for LAPG, who subsequently founded Morton Air Services at Croydon Airport in May 1945. That Company operated its first service on 21 January 1946.

#### Postscript

The experience gained from exposure to aircraft manufacturing is believed to have influenced aspects of London Transport's post war development and particularly the design of the Routemaster bus, which had an integral body constructed in aluminium for durability lightness and separate sub-assemblies for the engine and front axle and the rear axle to facilitate servicing. When Aldenham became the main maintenance depot for the LT bus fleet assembly line processes similar to those used in aircraft manufacturing were adopted.

# THE LONDON AIRCRAFT PRODUCTION GROUP

# Notes

- 1. Born Albert Henry Knattkies in New Normanton, Derbyshire. He subsequently emigrated to the United States, where his father worked for the Pullman Company and changed their family name to Stanley.
- Albert made his name by involvement in tramway developments in Detroit and New Jersey. On returning to the UK he joined Underground Electric Railways of London, becoming their Chairman in 1919. Before that he had been elected and served as the MP for Ashton-Under-Lyne 1916-1920, also as President of the Board of Trade 1916-1919. His Underground Chairmanship led to him being appointed in 1933 as Chairman of the London Passenger Transport Board, a post he held until 1947. He was appointed that in 1948 to the British Transport Commission, but died late that year. He was awarded the title of first Ashfield (the Nottinghamshire village where his Father was born).
- 2. Construction of Aldenham Works had commenced in June 1939 and was given priority when it was recognised that it could be used for industrial production as the threat of war increased. Post WWII, as the creation of the Green Belt around London prevented the housing development that would have justified continuing with the extension of the Northern Line, London Transport adopted the works from 1945 for checking inputs of new vehicles and bus maintenance. In 1956 the, substantially rebuilt, buildings were transformed into the main body overhaul works for LT's bus fleet, with that use continuing into the 1990s. The buildings were eventually demolished and the site cleared during June/July 1996. Slough Estates subsequently developed the Centennial Business Park there.
- 3. It may be worth noting that, in the immediate post war period Elstree Aerodrome, which lies adjacent to the Aldenham site, provided maintenance facilities for the operation of civil Halifax by London Aero Motor Services, one of the numerous companies that sought to provide freight services as demand grew for the import and export of goods.
- 4. Post WWII Leavesden airfield was used by de Havilland for aircraft maintenance and engine and propeller manufacturing, the former passing to Rolls Royce. Flying ceased in March 1994 and the airfield buildings were adopted for film production. The Bond film *Golden Eye* was produced there in 1995 and all of the *Harry Potter films* were also largely made there. Subsequently Warner Brothers introduced their *Studio Tour* attraction in 2012. Part of the airfield site has been used for housing development.
- 5. The area formerly occupied by the factory has been given over to a B&Q store, a Morrisons Supermarket and a Cineworld Complex.
- 6. The operational life of **PN460** was disappointingly short. It was delivered to 517 Squadron, which undertook Meteorological flights at RAF Chivenor in Devon until it was disbanded on 21 June 1946. The Halifax was struck off charge on 1 November 1946.
- 7. Other aviation companies which occupied sites at Aldenham during WWII were de Havilland, which had an engine test facility and Napier in connection with production of their aero engines.

# References

*A presentation loose leaf album of photographs* - believed to have been produced in 1945 by LT (the London Bus Museum copy has "Durrant AAM" embossed on the front cover and is from the Colin Curtis collection). AA M (Bill) Durrant was LT's Chief Mechanical Engineer, serving in the post from 1933-1940 and 1945-1965. He was largely responsible of overseeing the design of the Centurion tank and the mechanical development of the Routemaster bus.

Royal Air Force – Owen Thetford – Putnam (1988 edition) Exploring 20<sup>th</sup> Century London - website Welcome to Aldenham Works – London Transport Golden Jubilee brochure (1983) Duple – Alan Townsin – Venture Publications (1998) London Underground at War – Nick Cooper – Amberley (2014) By tube Beyond Edgware – Tony Beard – Capital Transport (2002) British Independent Airlines 1946-1976 – A C Merton Jones – TAHS (2000) The Halifax File – Nick Roberts – Air Britain

Thanks to Alan Dowsett of Handley Page Association who contributed to, and commented on, my draft of this article.

# PRESERVED LUFTWAFFE AIRCRAFT FROM 1426 (ENEMY AIRCRAFT) FLIGHT, RAF

No. 1426 (Enemy Aircraft) Flight RAF was a Royal Air Force flight formed during the Second World War to evaluate captured enemy aircraft and demonstrate their characteristics to other Allied units. Several aircraft on charge with the RAE Farnborough section were also used by this unit. The RAE facilities at Farnborough were utilized for the flight testing of German and Italian aircraft during the war. Many crash-landed airframes were brought to Farnborough for examination, testing and cannibalisation of spare parts to keep other airframes in serviceable condition. The main flight-testing work was carried out by the Aerodynamics Flight of the Experimental Flying Department and the Wireless & Electrical Flight (W&EF), the latter responsible for evaluation and examination of radar-equipped aircraft later in the war. The unit was established 21 November 1941 at RAF Duxford, made up of a small group of pilots who had previously been maintenance test pilots with No. 41 Group RAF. Attached at first to No. 12 Group RAF, its mission was to demonstrate captured types to Allied personnel and expose them to "the appearance, performance, and even the sound" of hostile types. Initially, it operated a Heinkel He 111H (Werk Nr 6853/AW177) shot down in Scotland in February 1940, a Messerschmitt Bf 109 captured during the Battle of France (Werk Nr 1304/AE479]) (turned over from the Air Fighting Development Unit), and a Junkers Ju 88A-5 (Werk Nr 6073/HM509). The Ju 88 was a more recent British acquisition after the pilot landed at night at RAF Chivenor in the belief it was an airfield in France - the crew had made a navigational error after being deceived by a Meacon. A General Aircraft Monospar (and later an Airspeed Oxford Mk II) was also assigned to the unit for general communication tasks and collecting spare parts. The aircraft in the unit changed throughout the war as further later marques came into the RAF's hands in various ways, including capture by Allied troops, forced or mistaken landings by German pilots, and defections. The flight co-operated with the RAF Film Unit, for which the usual British markings were removed and original German restored. Aircraft were then passed to the AFDU at (RAF Duxford 1940-1943) where they were extensively tested before passing them on to the flight. Several aircraft were lost to crashes, or damaged and then cannibalized for spare parts. Others were shipped to America for further evaluation. In March 1943, the unit moved to RAF Collyweston. Beginning in early 1944, the flight made a round of U.S. Army Air Force bases in Britain. After D-Day, the perceived need for the flight declined. The flight ceased operations at Collyweston on 17 January 1945 reforming at RAF Tangmere on the same date, with unit codes EA, as the "Enemy Aircraft Flight" of the Central Fighter Establishment, which finally disbanded 31 December 1945.

Four of the aircraft operated by the flight still survive in the UK; Bf 109 E-3 *DG200*, Bf 109G-2 *RN228* (known as 'Black 6'), Fiat CR42 *BT474* and Ju 88R-1 *PJ876*. All are or were displayed at the Royal Air Force Museum Hendon at various times.



Messerschmitt Bf 109E-4/B Wk.No. 4101 (DG200) was damaged by a Spitfire of No. 66 Squadron RAF, flown by Canadian ace George Christie; belly– landed at RAF Manston, pilot Wolfgang Teumer (of JG 51) taken prisoner, 27 November 1940. The Bf 109 was repaired using parts of other aircraft and tested by Rolls-Royce Limited. In February 1942 passed to Research and Development at Hatfield Aerodrome for propeller tests then to the Aeroplane and Armament Experimental Establishment (A&AEE) at Boscombe Down before in March 1942 to No. 1426 Flight.

In 1943, DG200 was retired from RAF at the time as more recent Bf 109 models had been acquired, and it was selected for long term preservation as a museum aircraft. It was eventually moved to the Royal Air Force Museum, Hendon in 1978.

Messerschmitt Bf 109G-2/ Trop Wk.No. 10639 (RN228), formerly of 8./JG 27; found abandoned at an airfield near Tobruk, Libya in November 1942 in a damaged condition by No. 3 Squadron Repaired by 3 Sqn using parts from other aircraft.



The Bf 109G-2 was repainted in a Desert Air Force scheme in WW2, given the squadron code "CV-V" and evaluated in North Africa. Transferred to 1426 Flight in late 1943. Owned by the MOD, and held at various locations including RAF Northolt where various individuals worked on the aircraft in their spare time. Later moved to IWM Duxford for a concerted effort to get it flying. After being restored to flying condition at Duxford in 1990s, Black 6 suffered a landing accident and the MOD refused to

grant it a further period of flying after the accident, nor would they sell the aircraft and so it was retired to RAF Museum Hendon, retaining its Luftwaffe desert camouflage scheme from IWM Duxford restoration.



On 9 May 1943, Junkers Ju 88R-1 Wk.No. 360043 night fighter (coded D5+EV), from 10./NJG 3 in Aalborg Denmark, flew to the RAF Station at Dyce (now Aberdeen Airport) with its entire crew and complete electronic equipment on board. The fact that Spitfire Vb fighters 165 (Ceylon) Squadron escorted it towards the end of its flight could indicate that its arrival had been expected. It was immediately transferred to Farnborough Airfield, received RAF markings and serial number PJ876, and was tested in great detail. The preserved aircraft is on exhibit at the RAF Museum, as one of the first two intact Ju 88s in aviation museums. The Luftwaffe only learned of this defection the following month when members of the crew, pilot Oberleutnant Heinrich Schmitt (son of the former secretary to the ministry for foreign affairs (1923–1929) Gustav Stresemann) and Oberfeldwebel Paul Rosenberger made broadcasts on British radio. The third crew-member, Erich Kantwill, refused to co-operate with the British and was treated as a normal POW.

Fiat CR42 Falco MM5701, (BT474) Marked 13-95. It made a forced–landing on the beach at Orford Ness due to engine failure, 11 Nov 1940 during an Italian AF attack on East Anglia. RAF Intelligence praised its exceptional manoeuvrability, further noting that "the plane was immensely strong",] though it stood little chance against faster, more heavily armed monoplanes.

It performed at its best with the Hungarian Air Force on the Eastern Front, where it had a kill to loss ratio of 12 to 1. The aircraft is now preserved in the RAF Museum, Hendon, as a very unique survivor.



# AIRLINE AND AIRLINER NEWS FOR APRIL AND MAY 2020 - BY JOHN R ROACH

The Executive Board of Deutsche Lufthansa AG has released details of a radical restructuring programme which will shrink operations following the coronavirus outbreak. The restructure will include the permanent decommissioning of six Airbus A380s and seven A340-600s as well as five Boeing 747-400s. In addition, eleven Airbus A320s will be withdrawn from short-haul operations.

UK leisure carrier Jet2 aiming to resume operations on June 17, after it previously cancelling all flying until May 1. The airline's parent Dart Group says that it had extended the shutdown due to "the ongoing uncertainty caused by the COVID-19 pandemic." Dart notes that decisions are "under constant review" in line with guidance from governments and relevant authorities. Jet2 has 92 aircraft, of which 74 are Boeing 737-800s. The fleet also includes eight 737 Classics, nine 757s and a single Airbus A321. All of the aircraft are listed as being in storage.

A British Airways aircraft loaded with vital medical supplies from China is on its way back to London Heathrow. Captain Robert Kendall is heading a team of flight crew operating the British Airways Boeing 777 which is loaded with ventilators as well as personal protective equipment (PPE) including goggles, face guards and gowns. The flight was operated in partnership with the UK Government and IAG Cargo. The British Embassy is working with the Department of Health to procure medical equipment from China and deliver it to NHS hospitals all over the UK. The flight departed from Shanghai at 11am local time on April 9th.

Avolon is removing 75 Boeing 737 Max jets from its orderbook, and while the world's fourth largest lessor by fleet value says it "remains committed" to the type, these add to cancellations from before the coronavirus pandemic. Airbus has recorded cancellations of 15 A350s as well as four A330neos during March, although it secured a firm agreement for 10 A350s from an undisclosed customer.

Six A350-1000s and four A350-900s from Latin America's LATAM are part of the cancellation.

Five A350-900s ordered by Kuwait Airways have also been removed from the backlog, although these aircraft had already been due for cancellation after the airline signed for A330neos.

British Airways is ferrying its remaining five Airbus A380s to storage in Chateauroux, France for a total of 11 A380s in storage in France (G-XLEG remains grounded in Manila since March 8, 2020).



The owner of Poland's national airline LOT said on Monday (13th April) it had pulled out of a deal to buy German rival Condor, raising the prospect of Berlin nationalising the troubled business. Two weeks ago, sources familiar with the matter said Germany was ready to take over Condor as it expected the deal with LOT to collapse due to the industry turmoil caused by the coronavirus pandemic.

Brazil's low-cost carrier Gol says it has reached an agreement with Boeing on cash compensation for the more-than-year-long 737 Max grounding, and the termination of 34 forward orders for the company.

British Airways has brought forward the retirement of FIVE of its Boeing 747-400 fleet. In a sad move for the dwindling worldwide fleet of active passenger 747s, the coronavirus outbreak has seemingly taken its latest victims. The aircraft, which were all stored at London Heathrow and not due for retirement until next year at the earliest, are now being flown to Kemble Cotswold Airport and are unlikely to fly again. Scrapping company ASI are receiving the aircraft, which will be parted out and scrapped over coming months. The first aircraft, G-CIVL (wearing the OneWorld livery) arrived at the Gloucestershire airport (14th April). It will be followed by these aircraft over coming days: G-CIVJ (Wednesday 15th April) G-CIVK (Thursday 16th April), G-CIVN (Thursday 16th April), G-CIVH (Friday 17th April).

Boeing has walked away from a \$4.2 billion deal planned with Brazilian aircraft manufacturer Embraer. The agreement would have formed Boeing Embraer – Defense, a joint venture largely aimed at promoting Embraer's commercial and defence aircraft outside of the South American nation. In a statement released by Boeing, the company announced that it would be discontinuing talks with the São Paulo-based corporation. The joint venture was awaiting final European Commission approval but was already operating under a preliminary agreement known as a "Master Transaction Agreement" (MTA). According to sources including Reuters, Boeing alleges that Embraer failed to meet unspecified requirements within that MTA by midnight 24 April.

"Speaking before a parliamentary committee for transport, the minister said the government would create a new company at the beginning of June that would take 100% of the airline. "The new Alitalia will start with a fleet of more than 90 aircraft compared with its current 113 airplanes," Patuanelli said, denying reports the fleet could be cut to 30 planes."

Stobart Group has agreed with the administrators of Connect Airways to buy back Irish regional carrier Stobart Air and aircraft lessor Propius in a deal aimed at managing outstanding financial commitments. The move follows the collapse earlier this year of Flybe, which had been acquired a year ago by the Connect Airways consortium in which Stobart held a 30% stake. Neither Stobart Air nor Propius – which operated independently within Connect – have been affected by Flybe's administration.

Airbus and Rolls-Royce have axed the E-Fan X demonstrator programme, a year before the experimental hybrid-electric engine airliner was supposed to fly. The E-Fan X programme was launched to explore electric aviation and involved equipping a BAE Systems Avro RJ100 with a hybrid engine. But Airbus chief technology officer Grazia Vittadini says that the airframer is having to "navigate the realities" of a world impacted by the coronavirus crisis, and concentrate on priorities. Singapore Airlines (SIA) will shift four Airbus A380s to long-term storage at Alice Springs airport in central Australia. The first of four double-deckers arrived on 26 April, according to a Facebook post by Alice Springs airport; the jets will be stored at Asia Pacific Aircraft Storage. We confirm that CargoLogicAir Limited, which operates from London Stansted Airport, has had its Operating Licence and Air Operator Certificate suspension lifted in order to provide cargo flights using two Boeing 747 aircraft on contracts to provide medical supplies. The license initially was suspended on February 27, 2020 for three months at the request of the company.

For the first time ever the South Atlantic British Overseas Territory of St Helena has received a direct flight from the UK. A Titan Airways Airbus A318, previously used on the British Airways now abandoned London City – New York JFK service, flew from Stansted to Accra and then Ascension, and on to the island half way between Namibia and Brazil On board were 28 passengers and eight crew. The aircraft also carried urgently needed medical supplies and other provisions. It night-stopped at Ascension southbound, but favourable winds on the return leg meant that the A318 could refuel at Accra and then fly non-stop to Stansted. SA Airlink withdrew its weekly Saturday service from Johannesburg via Walvis Bay at the end of March as a result of it ceasing all its operations in Southern Africa but now says it hopes to resume the weekly flight on 4 May.

Boeing has released its much-awaited Q1 figures in a virtual meeting broadcast to partners and shareholders. The report, unsurprisingly, details a revenue battering from both the ongoing 737 MAX saga and the COVID-19 outbreak. For the three months ending 31 March this year, the company posted a net loss of US\$641 million. By comparison, the same period in 2019 netted Boeing a total profit of US\$2.14 billion. To cope with both crises, the company has taken on an additional US\$5 billion in private equity and secured financing. In turn, this has distressed share values, which have plummeted towards the latter half of Q1.

As of 14 February, Boeing shares were trading at \$340.49. They dipped to a low of \$95.01 on 20 March before levelling out at \$149.14 at the close of the quarter.

Aircraft lessor GE Capital Aviation Services (GECAS) has terminated orders for 69 Boeing 737 Max, further reducing Boeing's Max backlog amid a downturn that has hammered airlines and the global aerospace industry.

German maintenance specialist Lufthansa Technik is working on a conversion for an Airbus A380 as part of its effort to offer temporary passenger-to-cargo modification services. Lufthansa Technik has not identified the customer but states that it has been awarded the technical and engineering task to support the "operational change" for the double-deck type. While

the modification is intended to comply with temporary passenger-to-freight regulatory exemptions drawn up to meet demand during the coronavirus crisis, the company indicates that it will offer the conversion as a permanent solution.

Virgin Atlantic is to cut over 3,100 jobs and retire its Boeing 747-400s in an effort to address the financial pressure of the coronavirus crisis. The airline says it will "immediately suspend" the use of all seven of its seven 747-400s and is still intending to retire four Airbus A330s, as previously planned, in early 2022. Virgin Atlantic has been introducing Airbus A350-1000s which are gradually replacing the operator's A340-600s and 747s, and it is also set to acquire A330-900s. The airline says its fleet will comprise 36 twin-engined aircraft, including Boeing 787s, from summer 2022. It is temporarily shifting its operations away from London Gatwick, moving its flight programme to London Heathrow instead – although it stresses that it will be retaining its Gatwick slots in order to return once demand improves.

Lufthansa Group will remain grounded throughout the summer and does not expect a new market "balance" to be found until 2023. Even in 2023, the carrier believes that passenger demand will be significantly below pre-Covid 19 levels. Lufthansa is reportedly on the brink of bankruptcy as negotiations continue with the German government for a  $\notin$ 9 billion bailout. Chief executive Carsten Spohr and Chancellor Angela Merkel entered talks last week (end of April) after the airline reported a  $\notin$ 1.2 billion operating loss in the first quarter of 2020. If the bailout talks fail, Lufthansa is reportedly also examining self-administered bankruptcy as an alternative.



Frontier Airlines has dropped an offer to charge passengers extra to keep the middle seat empty, following accusations of profiteering amid the COVID-19 pandemic by lawmakers in the U.S. House and Senate.

IAG chief executive Willie Walsh believes its planned acquisition of Spanish carrier Air Europa still makes strategic sense but notes work is still ongoing regarding pricing and competition issues before a decision on completion can be made. The Iberia and Vueling parent in early November outlined its plan to acquire Air Europa for  $\in 1$  billion (\$1.1 billion), in a deal it expected to close in the first half of this year. The move is to hopefully strengthen Iberia's presence at Madrid.

EasyJet founder Sir Stelios Haji-Ioannou has stepped up his campaign to have the airline's £4.5 billion order for 107 A320neos cancelled, according to reports. Sir Stelios will make an announcement that he will pay a reward to any 'whistleblower' in the easyJet ranks who supplies information leading to a substantial cancellation with Airbus. The reward will be offered if 100 of the 107 aircraft orders are cancelled.

Ryanair plans to cancel all Airbus deliveries of Airbus jets planned for its subsidiary Lauda, and expects to replace them with ones from Boeing, its chief executive Michael O'Leary.

United Airlines on May 9 ferried its last Boeing 757-200 (N14102) from active service at Orlando to Roswell, NM for storage. N14102 was the last active United Boeing 757-200. For now, the last United Boeing 757-200 revenue flight with N14102 was on April 23 between Houston (Bush Intercontinental) and Orlando as flight UA1188.