March 2025 Newsletter

Welcome to The Gloster Strut Newsletter. We hope you enjoy reading it. Please send any contributions, letters and comments to editor@glosterstrut.co.uk directly.

Photo of the Month

Planes from Cotswold Aero Club on a flyout to Turweston including a Europa, C42 and two Robins.

Chairmans Chat

Last week we had a very interesting committee meeting, it was a little overdue, so we had plenty to talk about of course.

One of the topics up for discussion being how we would like to sponsor a Strut outing for the members. A Strut museum outing, perhaps a dinner to celebrate the 80th year of the PFA / LAA, invest in some new equipment or throw the question open to suggestions from our membership, please feel free to do so! We appreciate your contribution as always.

We decided to double our efforts to promote flying activities to our younger generation, this will be included when our Summer programme bursts into life in May, hopefully with the arrival of better weather. Preceding our BBQ events we will have an area dedicated to kids being entertained with all things "flying", so any kids in the family, bring them along, kids eat free at the BBQ!!

We will be providing model planes and paints etc. and this is a "shout out" to those of you who have model making skills, knock up a couple of balsa models to be launched on the night. The Strut will provide the materials. Please let me know if you can provide a model. We can purchase a few to bulk up the numbers.

Last but not least, our Strut Newsletter needs YOUR input of members aviation stories, it all adds to the interest rating of the newsletter to hear about your flying or building

progress, or even just a day to remember. It's YOUR Strut and we appreciate you having your say.

Please bring family and friends along, it all adds to the continuation of our lively Gloster Strut.

Blue Skies – Mike

Urgent Reminder: SUBSCRIPTION RENEWALS

Most members have already renewed but a few of you are still outstanding. If you don't intend to renew, please let our Membership Secretary know at: membership@glosterstrut.co.uk

If, as we devoutly hope, it's just an oversight you are urged to renew WITHOUT DELAY by bank transfer. Details are

Account Name: The Gloster Strut Account

Type: Business Account

Account Number: 18562477

Sort Code: 60-05-16

Reference: your surname and first initial

Subscription rates are: Junior Member (under 25) free; First family Member (over 25) - £10 Additional family members - £5 each.

If you're unsure whether or not you have already renewed just ping an email to Harry and he'll let you know.

Did you know?

The Gloster Strut has, and will continue to make donations to worthy charities. For 2025 we will be donating the following:

Armstrong-Isaac's: £100.00

The Armstrong/Isaacs bursaries, run by the UK Light Aircraft Association (LAA), offer PPL students under the age of 30, and currently undergoing flight training the opportunity to apply for £1,500 towards the cost of learning to fly.

Fly2Help: £50.00

Fly2help is an aviation charity based at Gloucestershire Airport in Cheltenham. The charity was set up 15 years ago by passionate aviators, who were keen to share the wonder of flight with those in need. fly2help runs two charitable programmes; Air Smiles Days and our Aim High programme. Air Smiles Days support individuals and families facing challenging life circumstances by offering the opportunity for an experience day centred around a flight in a light aircraft and other aviation based activities.

Gasco: £200.00

Saving lives in General Aviation through Education. They run regular on-line and in-person seminars throughout the year. Free to attend, they feature experts, instructors and professionals working in the aviation industry.

The last meeting

The Flying Classroom

Dr Mike Bromfield, Professor of Aeronautical Engineering at Birmingham University, updated us on the talk he gave us 8 years ago about his University's programme of giving their aeronautical engineering students practical experience of flight test procedures. Over the years they have used a variety of certified light aircraft for this task, starting with a DH Rapide (rather noisy in the cabin and only room for the pilot up front), through a Percival Prentice (a type once used by the RAF for basic training – with side-by-side pilot and pupil but with a single passenger seat in the rear), Cessna 172. DH Dove, Robinson R44 helicopter and Piper P-28 Warrior.

Using commercial `off-the-shelf' electronic items, each passenger gets in-flight data sent to his/her individual iPad, together with a running commentary by the ex-service test pilot flying the aircraft.

The students are then required to analyse the data collected and produce a test report.

The University subscribes to the old adage – "tell me – I'll forget; show me I'll remember; involve me and I'll understand"

Mike gave us examples of the sort of pre-flight preparation and the types of testing involved. Naturally, stabilities – pitch, roll, directional and dutch-roll – feature prominently, as do stalls and handling qualities.

The University have good reason to be proud of their low-cost flying programme which enhances both their teaching and their students' chances of landing a job on graduation.

Many thanks, Mike, for a most interesting and informative talk.

The Wit & Wisdom of Aviation

Qantas Engineering Reports

Alleged reports filed by Qantas Airline Pilots and the Engineering Responses.

Pilot: *Autopilot in altitude-hold mode produces a 200 feet per minute descent.*

Engineer: *Cannot reproduce problem on ground.*

There are three simple rules for making a smooth landing. Unfortunately, no pilot knows exactly what they are.

1947 BSAA Avro Lancastrian Star Dust accident

Many years ago, 24 to be exact, I travelled to South America with a team intent on conquering the highest mountain in the world outside of the Himalaya, that being Aconcagua. On the way, we stopped to photograph a particularly impressive mountain called Tupungato some 50 miles distant and standing at over 6,500 metres high - note the traditional aviation mixed units! At that time, we didn't know the story of the Star Dust accident, but were told by our guides some days later during a rest day as the discovery of the wreckage was relatively new.

Tupungato : Photo taken from about 40 miles distant

On 2 August 1947, the airliner Star Dust, an Avro Lancastrian carrying six passengers and five crew over the Andes range, crashed into a steep glacier high on the Argentine side of Tupungato. The plane was quickly buried in the resulting avalanche and heavy snowfall that was taking place at the time. The plane lay undetected deep beneath the snow and glacial ice for over 50 years.</p>

Background

The accident aircraft, an Avro 691 Lancastrian 3, was built as constructor's number 1280 for the Argentine Ministry of Supply to carry thirteen passengers, and first flew on 27 November 1945. Its civil certificate of airworthiness (CofA) number 7282 was issued on 1 January 1946. It was delivered to BSAA on 12 January 1946, was registered on 16 January as G-AGWH and given the individual aircraft name "Star Dust".

Star Dust carried six passengers and a crew of five on its final flight. The captain, Reginald Cook, was an experienced former Royal Air Force pilot with combat experience during the Second World War, as were his first officer, Norman Hilton Cook, and second officer, Donald Checklin DFC. Cook had been awarded the Distinguished Service Order (DSO) and the Distinguished Flying Cross (DFC). The radio operator, Dennis Harmer, also had a record of wartime as well as civilian service. Iris Evans, who had previously served in the Women's Royal Naval Service ("Wrens") as a chief petty officer, was the flight attendant.

BSAA Lancastrian 3 G-AGWH painted as Star Dust

Star Dust's last flight was the final leg of BSAA Flight CS59, which had started in London on an Avro York named Star Mist on 29 July 1947, landing in Buenos Aires on 1 August. The passengers were one woman and five men of Palestinian, Swiss, German and British nationality. One was a British diplomatic courier, a King's Messenger. Marta Limpert, a German émigré, was the only passenger known for certain to have initially boarded Star Mist in London before changing aircraft in Buenos Aires to continue on to Santiago with the other passengers.

Disappearance

Star Dust left Buenos Aires at 1:46 pm on 2 August. This leg of the flight was apparently uneventful until the radio operator (Harmer) sent a routine message in Morse code to the airport in Santiago at 5:41 pm, announcing an expected arrival of 5:45 pm. However, Star

Dust never arrived, no more radio transmissions were received by the airport, and intensive efforts by both Chilean and Argentine search teams, as well as by other BSAA pilots, failed to uncover any trace of the aircraft or of the people on board. The head of BSAA, Air Vice Marshal Don Bennett, personally directed an unsuccessful five-day search.

A report by an amateur radio operator who claimed to have received a faint SOS signal from Star Dust initially raised hopes that there might have been survivors, but all subsequent attempts over the years to find the vanished aircraft failed. In the absence of any hard evidence, numerous theories arose—including rumours of sabotage (compounded by the later disappearance of two other aircraft also belonging to BSAA); speculation that Star Dust might have been blown up to destroy diplomatic documents being carried by the King's Messenger; or even the suggestion that Star Dust had been taken or destroyed by a UFO (an idea fuelled by unresolved questions about the flight's final Morse code message).

Discovery of wreckage and reconstruction of the crash

In 1998, two Argentine mountaineers climbing Mount Tupungato—about 60 mi (100 km) west-southwest of Mendoza, and about 50 mi (80 km) east of Santiago—found the wreckage of a Rolls-Royce Merlin aircraft engine, along with twisted pieces of metal and shreds of clothing, in the Tupungato Glacier at an elevation of 15,000 ft (4,600 m).

In 2000, an Argentine Army expedition found additional wreckage—including a propeller and wheels (one of which had an intact and inflated tyre)—and noted that the wreckage was well localised, a fact which pointed to a head-on impact with the ground, and which also ruled out a mid-air explosion. Human remains were also recovered, including three torsos, a foot in an ankle boot and a manicured hand. By 2002, the bodies of five of the eight British victims had been identified through DNA testing.

A recovered propeller showed that the engine had been running at near-cruising speed at the time of the impact. Additionally, the condition of the wheels proved that the undercarriage was still retracted, suggesting controlled flight into terrain rather than an attempted emergency landing. During the final portion of Star Dust's flight, heavy clouds would have blocked visibility of the ground. It has therefore been suggested that, in the absence of visual sightings of the ground due to the clouds, a navigational error could have been made as the aircraft flew through the jet stream—a phenomenon not well understood in 1947, in which high-altitude winds can blow at high speed in directions different from those of winds observed at ground level. If the airliner, which had to cross the Andes mountain range at 24,000 feet (7,300 m), had entered the jet-stream zone—which in this area normally blows from the west and south-west, resulting in the aircraft encountering a headwind—this would have significantly decreased the aircraft's ground speed.

Mistakenly assuming their ground speed to be faster than it really was, the crew might have deduced that they had already safely crossed the Andes, and so commenced their descent to Santiago, whereas in fact they were still a considerable distance to the east-north-east and were approaching the cloud-enshrouded Tupungato Glacier at high speed. Some BSAA pilots, however, expressed scepticism at this theory; convinced that Cook would not have started his descent without a positive indication that he had crossed the mountains; they have suggested that strong winds may have brought down the craft in some other way. One of the pilots recalled that "we had all been warned not to enter cloud over the mountains as the turbulence and icing posed too great a threat."

A set of events similar to those that doomed Star Dust also caused the crash of Uruguayan Air Force Flight 571 in 1972 (depicted in the film Alive), although there were survivors from that crash because it involved a glancing blow to a mountainside rather than a head-on collision.

Star Dust is likely to have flown into a nearly vertical snowfield near the top of the glacier, causing an avalanche that buried the wreckage within seconds and concealed it from searchers. As the compressed snow turned to ice, the wreckage would have been incorporated into the body of the glacier, with fragments emerging many years later and much further down the mountain. Between 1998 and 2000, about ten per cent of the total expected wreckage emerged from the glacier, prompting several re-examinations of the accident. More debris is expected to emerge in future, not only as a result of normal glacial motion, but also as the glacier melts.

A 2000 Argentine Air Force investigation cleared Cook of any blame, concluding that the crash had resulted from "a heavy snowstorm" and "very cloudy weather", as a result of which the crew "were unable to correct their positioning".

STENDEC

The last Morse code message sent by Star Dust was "ETA SANTIAGO 17.45 HRS STENDEC". The Chilean Air Force radio operator at Santiago airport described this transmission as coming in "loud and clear" but very fast; as he did not recognise the last word, he requested clarification and heard "STENDEC" repeated twice in succession before contact with the aircraft was lost. This word has not been definitively explained and has given rise to much speculation.

The staff of the BBC television series Horizon—which presented an episode in 2000 on the Star Dust disappearance—received hundreds of messages from viewers proposing explanations of "STENDEC." These included suggestions that the radio operator, possibly suffering from hypoxia, had scrambled the word "DESCENT" (of which "STENDEC" is an anagram); that "STENDEC" may have been the initials of some obscure phrase or that the airport radio operator had misheard the Morse code transmission despite it reportedly having been repeated multiple times. The Horizon staff concluded that, with the possible

exception of some misunderstanding based on Morse code, none of these proposed solutions was plausible.

The simplest explanation put forward to date is that the spacing of the rapidly sent message was misheard or sloppily sent. In Morse code, determining accurate spacing between characters is vital to properly interpret the message; "STENDEC" uses exactly the same dot/dash sequence as "SCTI AR" (SCTI being the ICAO four-letter code for Los Cerrillos Airport in Santiago, AR being the Morse abbreviation for "over"). Alternatively, the Morse spelling for "STENDEC" is one character off from instead spelling VALP, the call sign for the airport at Valparaiso, 110 kilometres north of Santiago.

Aconcagua

You'll be pleased to know that we succeeded in our ascent of Aconcagua, which stands at 22,831 feet, although not everyone made the summit. I was one of the seven that did from a team of sixteen climbers.

Our trip was for several reasons; to climb the mountain, to do important research into high altitude acclimatisation, and to raise money for SSAFA – The Soldiers, Sailors, Airmen and Families Association Forces Help. We succeeded on all three. If you're interested, a full report on the trip is here:

https://www.ukmountains.rocks/aconcagua/aconcaguaindex.htm

Downloads from the CAA and others

LAA Stuff

We are happy to tell you that we now have a date for the popular Aircraft Carpentry workshop:

Date: Tuesday 15 April 2025

Time: 9.00 - 5.00

Cost: £206 for members and £226 for non-members

Venue: LAA H/Q

Alan James hosts this course which covers quality and specification of approved timber, plywood, adhesives and how to use them, marking out, cutting, drilling, laminating, shaping, sanding, scarfing and finishing. As an LAA Inspector, he can also guide you through the paperwork process for repairs and modifications.

This is the perfect course for the would-be aircraft builder!

Insight

The December edition of Insight is here:

https://www.airproxboard.org.uk/media/45dbor1j/december-2024.pdf

It looks at an Airprox involving a PA-22 and a Tiger Moth in the circuit at Compton Abbas. The article concentrates on the pitfalls associated with assumption and discusses what defences pilots can employ so that they don't get caught out by an inaccurate mental model. It also provides a few options for pilots to consider if they find themselves in an uncomfortable situation in or around the visual circuit at an uncontrolled aerodrome.

From Harwarden

The latest content from the Airspace & Safety initiative is here:

https://airspacesafety.com/

It covers the Hawarden Radio Mandatory Zone (RMZ).

A new occurrence report with air traffic control and pilot perspectives, looks at an infringement of the RMZ and includes observations on route and meteorology planning.

https://airspacesafety.com/infringement-occurrences/

An updated hot-spot narrative has been written by the air traffic control team at Hawarden aerodrome which is a key member of the Northwest Local Airspace Infringement Team.

https://airspacesafety.com/hot-spot-narratives/

And finally, a new Hawarden RMZ guide includes a summary of the RMZ and details its requirements.

https://airspacesafety.com/wp-content/uploads/2025/01/Hawarden-RMZ-ASI-01-2025.pdf

CAA Stuff

Publication of CAP403 Flying Displays Edition 22

Following an earlier consultation, we have published a new edition of CAP 403 (Flying Displays and Special Events: Safety and Administrative Requirements and Guidance):

https://www.caa.co.uk/our-work/publications/documents/content/cap-403/

This focuses on organising and obtaining Permissions for Flying Displays and Special Events, including the roles and responsibilities of Flying Display Directors.

North West Transit Corridor

The North West Transit Corridor has now officially replaced the Manchester Low Level Route.

To operate within this restricted area pilots must:

Fly an aircraft with a Maximum Certified Take-Off Mass of 40,000 KG or less

Maintain a minimum in flight visibility of 5 KM

Use the Manchester or Liverpool QNH (altimeter) setting

Fly below 1500 feet AMSL

Keep the indicated airspeed below 140 KTS

Frequency monitoring is recommended but not mandatory:

Manchester FMC 7366 (Channel 118.580)

Liverpool FMC 5060 (Channel 119.855)

Detailed information on the NWTC boundaries and operational requirements is included in the UK Aeronautical Information Circular:

https://nats-uk.ead-it.com/cms-nats/opencms/en/Publications/aip-supplements/

We have updated the Airspace & Safety Initiative guidance and advice for pilots Flying in the North West:

https://airspacesafety.com/north-west/

Including a new guide to the Restricted Area EGR323 NWTC

https://airspacesafety.com/wp-content/uploads/2025/02/Restricted-Area-EGR323-North-West-Transit-Corridor-guide.pdf

Gloucestershire (Staverton) Airport

Following reports from the CAA on the subject of Airprox incidents, the airport is introducing some fairly severe measures to combat this. Have a read of this document which may help with future flight planning.

https://www.glosterstrut.co.uk/docs/traffic.pdf

Also, this letter from the Airport MD:

Dear Customer,

Following on from AAN 25 – 1018, published on Wednesday 12 February and the feedback that has followed, I wanted to add context and clarity.

From January 2024 to January 2025, Gloucestershire Airport experienced 10 AIRPROX occurrences either in the ATZ or in the vicinity of the ATZ. At the end of January we were visited by both our CAA ATS Inspector and the Principal Inspector to discuss the AIRPROX situation. This was a very direct and candid meeting and, in short, we agreed to take immediate action to address what the CAA referred to as "an unacceptable situation".

Having completed internal investigations and received the AIRPROX board reports for several occurrences, it was evident that the vast majority occurred between the hours of 10:00 and 14:00 local. This pattern has prompted us to attempt to spread flying operations evenly throughout the day in order to avoid unsafe peaks. We were reminded that Gloucestershire Airport was recently "On Notice" from the CAA, which meant the airport was at risk of having its Aerodrome License suspended, varied or revoked.

Following much hard work last year, we had the "On Notice" status removed and downgraded to "Special Attention" whilst we implemented the upgrades to the ATC facility which is close to completion. As the Accountable Manager it is one of my primary duties to ensure safety at the airport and I will do everything I can to address the issues around AIRPROX occurrences.

On 04 February 2025 we held meetings with our primary Flying Training Organisations and Approved Ground Handling Agents to explain the situation and to gain feedback on our proposed measures. Unfortunately, due to the time constraints, and deadlines that that were agreed with the CAA, it was not possible to consult every user of Gloucestershire Airport. I want to make it clear that myself and the rest of my SLT absolutely want to

support businesses, however, given the seriousness of the circumstances, my options were extremely limited.

My primary concern will always be to protect the Aerodrome Licence and hence the decision was taken to manage the situation as detailed in the AAN. I assure you these measures will be reviewed as soon as it is practicably possible. In the meantime we continue to analyse the data to develop and improve the process as well as keep open dialogue with the CAA.

Your patience and support during these changes is very much appreciated and I shall update you all again once I have any news on this situation.

Website updates

Hopefully, looking at the Gloster Strut website is something that more members are doing on a more regular basis. I have added a 'Calendar of Events' on the Home page which lists as many events as I am aware of. If you have a particular event that you think should be published, then please let me know the details and I'll add it in. To keep it current, events that have passed are no longer shown.

Not only that, but there are useful links to all sorts of websites, LAA, Weather forecasts, Europa Club and others. Why not have a look around and let me know if there's something you think would be useful to Strut members.

Sales and Wants

Take a look at the Sales and Wants page (http://www.glosterstrut.co.uk/sales.php) of the website and grab yourself a bargain. Don't forget, this is a free service to any of our members.

Simply contact the editor (editor@glosterstrut.co.uk) with a photo and some words and the magic will happen. It would greatly help if the editor is updated when the item is sold or withdrawn so we can keep the page fresh and up to date.

The next meeting

The March Strut meeting will be held on Tuesday 11th March at The Victory Club, (Lypiat Rd, Cheltenham GL50 2SY).

The speaker is yet to be finalised but as always, we can promise you an interesting and entertaining evening.