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INTERNATIONAL RELIEF AID

This Boeing 757-225 (PCF) of Samaritan's Purse – an international non-denominational relief organisation - arrived in Malta recently inbound from Tel Aviv. According to their website, the aircraft was carrying a load of advance trauma life support kits. The aircraft departed the Mediterranean island the next day on its way to Roberts International Airport which serves the capital of Liberia, Monrovia. The twinjet which is registered N783SP was originally delivered to the now defunct Eastern Air Lines in December 1985. Prior to its delivery to Samaritan's Purse, the aircraft was flying for Pacific Air Express as VH-PQA.

These American narrow-body airliners are very interesting. Passenger 757-200s are modified for cargo use as Special Freighters (SF) and Precision Modified Freighters (PCF).

The 757-200F can carry a payload of 72,210 pounds (32,755 kg) over 2,935 nautical miles (5,435 km; 3,378 miles). Photo credit - Mario Caruana / MAviO News





OFFICIAL JOURNAL OF:- Commercial Aviation Association of Southern Africa, The Airlines Association of South Africa, The Association of South African Aircraft Traders, Association of Training Organisations of South Africa, Aerodromes & Airports Association of South Africa, Association of Aviation Maintenance Organisations, South African Society of Aerospace & Environmental Medicine, Helicopter Association of Southern Africa, Aircraft Owners & Pilots' Associations of Southern Africa, Air side Operators, Association of South Africa, South African Aerial Applicators Association, East African Commercial Aviation Association, African Airline Association (AFRAA) Media Partner.

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AVIATION UPDATES

By Heidi Gibson

I hopped onto AFRAA's Sky Connect dialogue session recently, moderated by Raphael Kuuchi who was hosting Stephan Hannemann, vice president sales and marketing for the MEA region at Embraer Commercial.

What an interesting discussion. We got first-hand knowledge of the third largest air-frame manufacturer's take about the current African market and future views. Just for starters, Stephan referred to IATA's projected RPK or revenue passenger kilometres growth rate for Africa at 3.7% - making us the third highest in the world – higher than Middle East, North America and Europe.

Of the total JET deliveries 8,790 - 320 or (3.6%) are expected in Africa while in the turboprop sector - total 2,210 our percentage share is much higher with 210 expected to be delivered in Africa or 9.5%. Expect to see many more turboprops in the skies over Africa. He identified challenges such as connectivity, right sizing, financing and deregulation.

Which of course, brings me to the recent hiccup between Tanzania and Kenya that saw Tanzania rescind approvals for KQ to operate flights between Dar es Salaam and Nairobi. It's a rivalry that dates back to the early 1970s that saw the breakup of this formidable airline. Tanzania's move was supposedly in retaliation over Kenya's refusal to

allow Tanzanian cargo planes the right to land. Luckily the spat was sorted out in days.

Just how fragile is the African airspace and when will the SAATM policy be fully understood and implemented. As Stephan pointed out intra-African connectivity – that is air travel between African countries – is where the growth is expected. But this can not and will not happen until we get ourselves sorted out.

And then of course there was the whole Boeing affair that just seemed to go from bad to worse. There were wrongly drilled holes, loose rudder bolts, and a fuselage section that got ripped out during a flight. Luckily it happened when the aircraft was not too high. Then there was "the engine that caught fire". An Atlas Air Boeing 747-8 (BA.N), cargo plane that had to make an emergency landing in Miami International airport after suffering an engine fire. This was either earlier or after a T'Way Air flight 216, Boeing 737-800 with 122 passengers on board, faced another harrowing situation when a bird struck its engine. Another emergency landing. The incident occurred as the plane was about to land at Incheon airport in South Korea. And now the jokes have started.

I end off on an historic note. This month we are privileged to carry an exclusive story written for us by a great and well-known aviation figure from Malta – Joe Ciliberti who served 32 years as president of the Malta Aviation Society. He recalls some of the memorable moments of this historic airline due to close down at the end of March. It's great read so please turn to pages 10 and feast your eyes. Reach for the stars.

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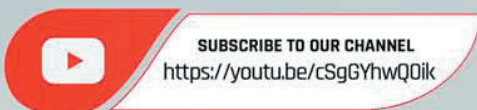
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NEW AND UPCOMING BUSINESS AIRCRAFT

As business aviation climbs back to normal, there is no shortage of choices for aircraft buyers.

BEECHCRAFT KING AIR 360/360ER

Deliveries began late last year of the most recent iteration of Textron Aviation's big turboprop—both the standard and extended-range (ER) versions. Improvements include autothrottles, a digital pressurization system, and a redesigned cabin. The ThrustSense autothrottles from Innovative Solutions & Support reduce pilot workload by managing engine power from take-off to landing, while the digital pressurization system automatically adjusts cabin pressurization during climb and descent. Cabin altitude is now a comfortable 5,960 feet while the 360 cruises at 27,000 feet.

BOMBARDIER GLOBAL 8000

Fitted with a pair of GE Passport turbofans, the same engines employed by its predecessor, the 7500, Bombardier envisions the Global 8000 to claim the title of the fastest jet on the market, boasting an impressive top speed of 0.94 Mach.

However, the ambitions extend beyond speed, as Bombardier is targeting the longest range as well, aiming for 8,000 nautical miles under standard passenger load and NBAA IFR parameters.

Anticipating a maximum take-off weight of 114,850 pounds and a full-fuel payload of 2,275 pounds, the Global 8000 is designed to accommodate up to 19 passengers in various configurations. Operating at a cabin altitude of 2,900 feet while cruising at 41,000 feet, the aircraft's maximum operating altitude is set at an impressive 51,000 feet. With a fully loaded aircraft, the projected take-off distance required is 5,760 feet, and the landing distance is estimated to be around 2,237 feet, according to specifications released by the company.

On the flight deck, Bombardier's proprietary Vision integrated avionics suite takes command, offering pilots an array of display and monitoring options. The fly-by-wire flight control system not only enhances control precision but also provides envelope protection for added safety. The Global 8000 emerges as a remarkable aircraft, combining speed, range, and cutting-edge avionics to redefine the possibilities of long-haul business aviation.

BOMBARDIER GLOBAL 7500

The Bombardier Global 7500 maintains the familiar fuselage cross-section of its legacy predecessors, standing at six feet, three inches tall and eight feet, two inches wide. However, it elevates the experience by extending the length by 11 feet, resulting in an expansive 2,637 cubic feet of cabin space. Innovations abound in this aircraft, encompassing enlarged cabin windows and the introduction of the exclusive Nuage passenger seats.

Introducing the GE Aviation Passport engines, a groundbreaking addition that draws inspiration from the high-efficiency CFM Leap models designed for the latest-generation Airbuses and Boeings. These engines feature advanced technology, including a 52-inch titanium "blisk" – a single forging uniting fan blades and disk to enhance efficiency by reducing weight and minimizing vibration.

The latter incorporates Collins Pro Line Fusion avionics, offering side-stick pilot controls and the latest in displays and safety features. Achieving a top speed of Mach 0.925, the aircraft combines performance with sophistication.

CESSNA CITATION LONGITUDE

The Longitude boasts the Garmin G5000 flat-panel touchscreen-controller avionics system, reminiscent of the avionics found in the new midsize Citation Latitude. This system includes optional features like a head-up display and enhanced vision, supporting a swift cruise speed of 483 knots and a full-fuel payload capacity of 1,600 pounds. Equipped with the LinxUs system, the aircraft provides real-time maintenance monitoring and solutions, even during flight. Notably, the Longitude offers enhanced maintenance access ports for user-friendly servicing compared to previous models.

Sharing the flat-floor cabin cross-section with the midsize Citation Latitude, the Longitude provides a spacious environment at six feet tall and more than six feet wide.

This makes it the narrowest in its class. The 25-foot-long cabin offers various configurations, accommodating up to 12 passengers, although the typical seating arrangement is for eight to nine. The cabin includes a full forward galley and an aft lavatory with a vacuum flushing toilet. The 112-cubic-foot baggage compartment is accessible during flight.

CESSNA DENALI

The Denali is Cessna's answer to Pilatus's phenomenally successful PC-12. The aircraft features a 53-by-59-inch rear



cargo door (slightly larger than the door on the PC-12) and a digital pressurization system that maintains a 6,130-foot cabin altitude to 31,000 feet.

The Denali's stylish flight deck equipped with the Garmin G3000 touchscreen-controller avionics suite and will offer high-resolution multifunction displays. Pilots will also benefit from such features as synthetic vision, weather radar, an advanced terrain awareness warning system, and automatic dependent surveillance-broadcast (ADS-B) capabilities.

The aircraft powered by a 1,300-shp advanced Catalyst turboprop engine from GE Aviation. It will feature full authority digital engine controls (fadec) and single-lever power and propeller control—making it much simpler to operate as any engine/propeller combination can be, and also dramatically cutting pilot workload.



DAHER TBM 940

A single turboprop the Daher TMB 940 can carry 4-5 people and has a range of 1,730 nm. The TBM 940 offers 300-plus-knot cruise speed while burning just 50 gallons of fuel per hour. The aircraft now comes standard with the HomeSafe one-button emergency landing system. Based on the Garmin Autoland technology, the system automatically guides the aircraft to a safe landing in the event of pilot incapacitation by integrating weather, traffic, terrain, fuel, range, and airport information. An autothrottle system and automatic de-icing are also standard. The deice provides airframe, propeller, and windshield de-icing and triggers the inertial particle separator to prevent engine icing.

DAHER KODIAK 900

Daher introduced the Kodiak 900 at EAA AirVenture with a new monster of an engine—the biggest PT6 yet, the PT6A-140A—rated at 900 shp. The Kodiak can tap into an extra 150 nominal horsepower throughout its range, making for grand application in the hot and high environments in which the Kodiak 100 has excelled.

With 210 ktas at 12,000 feet and 58 gph, and with an endurance of 4.3 hours with 45 minutes IFR reserve fuel., the five-blade Hartzell Daher Kodiak 900 maintains 15.6 inches of ground clearance, critical for rough-field operations. The pairing of engine and prop results in a TBO of 4,000 hours.

In the panel, pilots will find the Garmin G1000 NXi avionics suite, including synthetic vision and weather radar.

DASSAULT FALCON 10X

Dassault expects the 7,500-nautical-mile (at Mach 0.85) Falcon 10X to enter service in 2025. The twinjet pushes the design envelope not just in terms of size but also design and technology.

The 10X will feature the most advanced avionics and the tallest and widest cabin in its class, and it calls the model “the largest and most capable purpose-built business jet.” Compared with offerings from its bizjet peer group, the cabin of the 10X will be at least eight inches wider and five inches taller. It's six feet, eight inches tall; nine feet, one inch wide;

and 53 feet, 10 inches long, yielding 2,780 cubic feet of cabin space. Humidity levels can be set, and a new air filtration system delivers what the airframer says is “100 percent pure air.” Cabin altitude at 41,000 feet is just 3,000 feet.

The 10X features a new, all-carbon fibre No, highly swept wing with integrated winglets and a clever flap and leading-edge slat design, as well as a pair of Rolls-Royce Pearl engines bolted onto the back. The Pearls deliver more than 18,000 pounds of thrust each and incorporate new design features that make them cleaner and more efficient.

Up front, the digital touchscreen “next-generation” flight deck—based on the Honeywell Primus Epic system—features full fly-by-wire controls, automatic flight envelope, and “recovery” protections. It also offers the “FalconEye” system, which combines enhanced and synthetic vision and a dual head-up display that allows either pilot to fly—and land—without referencing the instrument panel, a particularly useful thing to have when visibility is limited.

DASSAULT FALCON 6X

The Falcon 6X is powered by new Pratt & Whitney PW812D engines rated up to 14,000 pounds of thrust. Dassault has seen a maximum range of 5,500 nm (at Mach 0.80, eight passengers and three crew) and an MMO of Mach 0.90 in flight test, with a typical mission at 5,100 nm and Mach 0.85.

Carrying a partial fuel load, the 6X can use runways less than 3,000 feet long, while balanced field length for take-off will be 5,480 feet (sea level, ISA, maximum take-off weight of 77,460 pounds).

The electrical and hydraulic systems have also been revised in the quest to simplify operations and reduce pilot workload.

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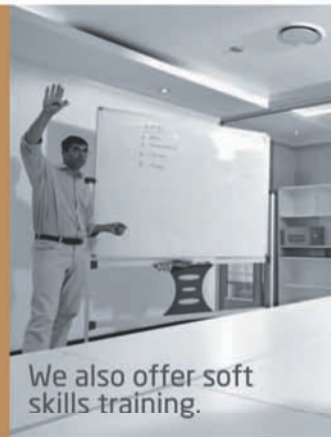
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The company's FalconEye combined vision system marries enhanced vision with synthetic vision to improve situational awareness.

DIAMOND DA50 RG

With FAA validation just around the corner, the anticipation for the new Diamond DA50RG is mounting stateside. Several DA50s are already flying in Europe and Canada, and the company hopes for the blessing to come soon to enable deliveries in the U.S.

Powered by a 300 hp, FADEC-controlled Continental CD-300 (270 hp maximum continuous power), a six-cylinder, turbo-diesel powerplant, the DA50 RG will operate on jet-A1 at burn rates as low as 9 gph. The maximum range is roughly 750 nm (with a 30-minute reserve) at the 9 gph burn rate. The DA50 RG offers a spacious cabin—among the top in its class—with seating for five and generous baggage capacity.

In the panel, the DA50 RG hosts the Garmin G1000 NXi integrated flight deck with the GFC 700 three-axis autopilot. Options include electric air conditioning, a GCU 476 keypad, and a TKS anti/de-icing system.

GULFSTREAM G700

Gulfstream is finishing up its G700 flight test program and is expected to debut the step up from the G500/G600 by the first half of 2023. That's exciting news for pilots and customers alike, as the G700 represents a sweet spot in the market for ultralong-range jets—going just as fast and almost as far as the G800.

With the same Rolls-Royce Pearl 700 engines delivering power to the G800, the longer G700 carries up to 19 passengers in up to five flexible living areas. With a 7,500 nm maximum range and a maximum cruising altitude of 51,000 feet, the G700 maintains 100-percent fresh air and views through 20 panoramic windows.

The airplane was designed under an overarching philosophy—by pilots for pilots—apparent in the updated Symmetry Flight Deck in the front office.

GULFSTREAM G400

Not to be outdone by its larger brethren, the G400 is poised to fill the niche in the large-cabin midsize market with its best-in-class passenger cabin cross section—and the benefit of technologies developed for the G700 and G800.

The G400 features twin Pratt & Whitney PW812GA engines, rated at 13,496 pounds of thrust each, with a maximum take-off weight of 69,850 pounds and a full fuel payload of 4,050 pounds. In configurations flexing up to two and a half living areas, up to 12 passengers can ride along, or relax in berths for up to five people.

HONDAJET ELITE S

The latest upgraded HondaJet, the Elite S, offers a 200-pound increase in maximum take-off weight, flight deck improvements, better nosewheel steering, and more available paint colours. The weight increase allows one extra passenger or stretch the aircraft's range by 120 nautical miles.

New avionics features reduce pilot workload and aircraft communications, Data comm allows pilots to basically text message air traffic controllers for clearances or en route services.

A new nosewheel advanced steering augmentation system reduces pilot workload, by helping to keep the aircraft on the runway centreline during the landing rollout, particularly during adverse weather.

PIPER AIRCRAFT'S 'ELECTRIFIED' PA-28

In an announcement at EAA AirVenture, Piper made it known that it has joined forces with CAE and Safran in the pursuit of a supplemental type certificate for an electric version of its PA-28-181 Archer model. Safran's powertrain will provide the thrust for the updated single, and CAE will provide the training and support services that flight training organizations will need to operate the airplane.

With more than 30,000 PA-28 variants produced—like the Piper Archer TX shown below—the consortium sees an ample market for the STC once it becomes available.

TECNAM P2010 GRAN LUSSO

Tecnam Aircraft aims squarely for the luxury market with the latest version of the P2010 single-engine piston airplane, powered by the Continental CD-170 powerplant. The Italian OEM selected all of the high-end options from the P2010's portfolio and dressed up the works with buttery smooth, hand-stitched leather seats and a covered control yoke.

There is a new panel layout to house the Garmin G1000 NXi suite, plus the GMC 707 autopilot, and GCU 475 flight management system keypad in the centre console.

THE RISE AND FALL OF AIR MALTA

By Joe Ciliberti

Next month, Air Malta will close down. It will be replaced by a new government-owned airline known as KM Malta Airlines. In this special feature, Joe Ciliberti who served 32 years as president of the Malta Aviation Society recalls some of the memorable moments of this historic airline. He wrote this feature exclusively for World Airnews.

When Air Malta operated its first flight in 1974, I was in my mid-teens but very keen on military aviation. The birth of one's own country national airline could not go unnoticed.

So, from a young enthusiast's point of view, I think back to one of the first two Boeing 720Bs (AP-AMG) that held a speed record that was stenciled in on the side of the jet. The first two Boeings were heavily utilised and the airline started flying with just these two 720s to multiple airports in Europe and Libya.

Every now and again, when one of 'our' 720s, was sent away for maintenance, a Pakistan International Airlines (PIA) was used as a replacement. On one such occasion, on Nov 14, 1977, an Air Malta flight, operated by a PIA jet (AP-ATQ) suffered an undercarriage problem when the nose wheel would not come down. The runway had to be foamed by the RAF (and there's another story to the foam availability during this incident) and thankfully the Boeing made a safe and successful landing.

It is interesting to note that the same AP-ATQ had a very similar incident in Teheran 10 years previously where it also had to land with a retracted nose wheel. Those were exciting years for the young airline.

Some of my friends who were fellow aviation enthusiasts got to fly for Air Malta over the years, including Tito Aquilina, Robin Zammit and Frankie Xerri. Others joined as cabin crew and/or ground staff but each and every friend who worked for Air Malta had a passion for aviation. All succeeded in their respective careers.

In those days passengers were allowed to sit in the jump seat, and I used to regularly get invited up to the cockpit for the ride. I must admit that at times, I dreaded this, as I preferred to sleep during the flight. However, it was always kind of the air crew to ask me to join them in the cockpit.



WHO IS JOE CILIBERTI?

Ciliberti has had a long career in aviation. On a voluntary basis he started the Malta International Airshow in 1993 and has headed the event for 26 airshows until his retirement in 2022. He also served on the European Airshow Council board of directors 1996-2022 and presently is the CO of the Association of Naval Aviation, Squadron 49 or 'Med Knights'.



One of only two widebody aircraft to ever be adorned in the livery of Air Malta was this Airbus A310-222 registered OO-SCI. It was inducted in the Air Malta fleet in December 1994. The aircraft has since been converted to a freighter and still flies today as N455FE with Federal Express. (File Photo: Joe Ciliberti)

As time went by, the airline grew and diversified both its destinations as well as the types of aircraft. I recall, for example, when Air Malta bought its first-ever new jets from Boeing. This time it was the Boeing 737-200s in 1986. This was considered a feat at the time, as the airline opted to decrease the leasing of aircraft for its route network and instead show boldness and a belief in its future. There was no reason to doubt anything else at the time.

Malta was proud of its airline. The whole aviation community ensured the success of KM. At that time in the 80s and 90s chartered flights were in high demand. There was Britannia Airways, Monarch, Dan-Air London, Court Line and other less known carriers.

Air Malta also had charter flights. I vividly remember a case when I was sitting in the office of the Director of Civil Aviation, Salvu Fenech, and he received a call to issue a permit for an extra flight by Alitalia as the Italian airline had a higher-than-expected seats request and wished to operate this extra flight on a particular day. The director replied 'I will call you back' and immediately lifted the phone again and asked Air Malta if their Rome flight was full on that day, to which (I assume) the answer was 'no'.

Promptly, Fenech informed Alitalia that their request was refused. Just like that! Also, Fenech insisted that the duty managers in his department checked every passenger flying on the non-Air Malta charter flights to ensure no one was flying the British chartered flights (which were cheaper in price) thus not using Air Malta to fly to Britain and back. I have a lot of admiration for Salvu Fenech who, in his position as director of Civil Aviation Malta, fiercely protected Malta and its airline's interests.

THE LEASING MARKET

The airline was very active in the leasing market and repeatedly leased aircraft from all over the world. It was not uncommon to see some of Air Malta's jets having their eight-pointed cross sprayed over, which meant the aircraft was at the end of its lease and about to depart for good. With demand for its services continuing to soar, between 1994



The purchase of the Avro RJ70 in the mid-nineties was highly controversial. Four of the type were inducted into the fleet of Air Malta registered 9H-ACM, 9H-ACN, 9H-ACO and 9H-ACP. It was later revealed in parliament that during the span of 4 years (1994-1998) the fleet had a staggering 31 engines changed. The aircraft proved to be hopelessly uncompetitive on the KM network at the time. (File Photo: Joe Ciliberti)

and 95, the airline made use of two widebody aircraft, Airbus A310s - registered OO-SCI and D-AICM .

One other aircraft the Luqa-based airline leased was a Boeing 727 from Faucett Peru. This aircraft went missing, still painted in Air Malta colours while being ferried back on 11th September 1990. The trijet registered OB-1303 was never found. In their last distress message sent to ATC, the crew said their intention was to ditch, having run out of fuel over the Atlantic.

On a personal note, I always felt proud when I saw Air Malta's jets in foreign airports, especially in Libya where I worked for five years. There was fierce competition between Libyan Arab Airlines and Air Malta flying the Luqa-Tripoli route but one flight out of Tripoli remains stuck in my mind.

It was very stormy weather over Tripoli, Malta and in between. The flight was delayed getting into Tripoli and as I knew some of the staff at Tripoli's airport, I was told that even if the plane arrives in Tripoli there is a big chance the flight





The first flight between Malta and Zurich was flown on 3rd April 1977, when this photo was taken. Flight KM121 was operated by a Boeing 707-321 wet-leased from Dan-Air London during the height of the Summer season. G-AZTG had the full Air Malta livery. The quadjet flew in a hybrid-scheme with Dan-Air titles and Air Malta colours the following year when returned to the UK. (File Photo: Air Malta)

back to Malta will be further delayed due to adverse weather. Well, the plane landed and I got on it, along with the rest of the passengers, all of us drenched. Sure enough, as soon as we got airborne, we hit bad weather. The 720B's engines could be heard working hard to keep the aircraft in flight and the strong winds made the flight very bumpy for the first 15 minutes or more.

As soon as we got to an area of relative smooth air, the hostesses quickly started serving drinks. Remember that after weeks in a country where alcohol is prohibited, most passengers were looking forward to a little tippie as soon as they get on board out of Libya. The smooth patch didn't last more than five mins. Again, we were all holding on to dear life again while the aircrew were trying to fly the jet.

At this moment just as one of the hostesses was busy pouring a glass of orange juice for a Libyan passenger, the plane jerked violently. That glass of orange juice ended up in the channel of a Texan Cowboy hat of a fellow American who worked with the same company I worked for. He looked at the hostess, was not too impressed, and then lifted his hat off his head and poured the orange juice on to the aisle muttering some unprintable words!

For most of us on board the pilots were heroes as they got us home!

FLEET CHOICE AND ROUTES

Air Malta cannot be mentioned, without bringing to mind, the purchase of the BAe146/Avro RJ70s during the mid-90s. This would haunt KM for years. This after it was revealed in parliament that the relatively small fleet of just four aircraft had a staggering 31 engines changed during their short time n-service!

Only 11 RJ70 aircraft were ever built (plus one prototype). Later in the same decade, Air Malta also acquired three RJ85s for its Italian subsidiary Azzurra Air. In my opinion, the idea running a feeder out of Malta was a good one in those days. For instance, Sicilians had no early morning flights to the UK and Germany so they had to fly to Rome or Milan to catch an onward flight to their final destination.

Air Malta thought it could capture that market by flying the short route to Catania and Tripoli to get more passengers on their longer-range flights. However, as I remember it, by the time Air Malta finally got hold of the British jets, the hub idea was practically abandoned and the RJ70s were being used for flights even as far as the UK. That was a big no-no simply because the jet was slow, small, and uncomfortable for flights longer than an hour. This is just a layman's opinion of course, but that's how I saw the Avroliners' saga from outside the industry.

The choice of that aircraft was never a clever one, even if the intentions may have been good. Flying short-haul with a four-engined jet was already one big risk when it comes to maintenance, fuel costs etc. The BAe 146 / Avro RJ was the last proper commercial aircraft ever built by the Brits. They gave up after the Avroliner and never built a commercial airline-type jet on their own again.

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During the 2014 edition of the Malta International Airshow, an Air Malta Airbus A320neo flew in formation with the world famous Red Arrows. The flight has particular historical significance in that it was organised to commemorate the 40th anniversary since KM's first flight and the 50th display season for the RAF Aerobatic Team. (File Photo: Air Malta)

It must be added that part of that deal involved the Armed Forces of Malta which received two BN-2T Islanders, one of which has just been upgraded and still serves AFM very well.

LOW-COST AIRLINES

The new century brought with it the arrival of low-cost airlines in Europe and Malta's accession to the EU. There were heated discussions within the political party in government on whether we should make life hard for low-cost airlines in order to protect Air Malta.

I had flown two or three flights on Easyjet and Ryanair while travelling around Europe. While I was shocked at the different way passengers were treated, I realised that the low-cost pull was too much to resist. So, I wrote to Dr Lawrence Gonzi, prime minister of Malta at that time, and suggested we should split Air Malta into two halves, effectively into two airlines. At that time, KM had ten jets, so it was my suggestion that Air Malta should continue to fly the classic routes, while a new 'fun' airline would switch to low-cost so that Malta delayed the arrival of foreign low-cost airlines to the island. That way, as the Maltese and others get used to the low-cost way of flying, we would be giving Malta's own low-cost airline a head-start.

The prime minister replied within a couple of hours and he said that while he thought it was a good idea and agreed with the proposal, it would not go down well with the airline's workers and its unions.

One of two episodes where I had direct communications with the airline was the repainting of one of carrier's Airbus 320's in the old, original colour scheme of Air Malta. I was making my way to Skyparks for an airshow meeting. I was stopped by Capt. Alan Farrugia who told me if I could help in my own way for a jet to be resprayed in KM's retro scheme after having been leased out to now defunct Mexican carrier Interjet as XA-SOB.

He told me that the powers-that-be in the airline were not keen on the idea of repainting the jet, now re-registered gH-AEI in retro colours.

That same evening, I sent a WhatsApp message to the Hon Minister Karmenu Vella to discuss the matter. This

was around 9pm. He replied later that same night. His message was 'good idea, let's do it'. Later I got to know he was on a KM flight from London Heathrow with Johan Debattista, the 'aviation man' within the ministry at that time. The airframe was eventually retired from the Air Malta fleet in 2020 and today flies with Croatian ACMI provider Trade Air as 9A-BTI.

THE MALTA INTERNATIONAL AIRSHOW

The other episode was the flight I finally managed to co-ordinate that coincided with the Malta International Airshow. I had been quietly informed that Air Malta would love to fly at our show in formation with the Red Arrows.

This had been going on for several years but was always unofficially informed, from the RAF side, that they were not keen on it. Nevertheless, I officially wrote to the RAF and had my request immediately turned down. When I told my British friends in the know that the RAF had refused our invitation, I was told that the then new Air Chief Marshal would never agree to such a proposal.

Two years later the same British friends suggested I write again. Logic told me the same Air Chief Marshal would give the same reply. But my good friends in the UK had done all the ground work and when the ACM was persuaded to allow the Reds to fly with Air Malta's jet, they got back to me with their proposal to renew the request. The rest is history and one of the proudest moments in my airshow career was seeing our own Air Malta's Airbus leading a formation of red-painted RAF Hawks globally known as 'The Red Arrows'.

Seeing an airline fold is never a good experience. Seeing one's own national airline fade into history is a very sad occasion. Why the airline has allowed itself to get into the current sad situation is not for me to judge, however, I take this opportunity to salute each and every person who worked for Air Malta all through these past 49 years.

Air Malta will close down on 30th March 2024 and will be replaced by a new government-owned airline known as KM Malta Airlines.

FIRST C-27J SPARTAN FOR TANZANIA

Earlier this year the Italian Ministry of Foreign Affairs and International Co-operation, aerospace, defence and security company Leonardo and the Tanzanian Ministry of Defence signed a contract for the supply of two C-27J Spartan tactical transport aircraft.

Under this agreement Tanzania becomes the fifth African customer of the aircraft, after Chad, Kenya, Morocco and Zambia.

The C-27Js will be operated for carrying out humanitarian missions, search and rescue and fighting fires operations on Mount Kilimanjaro and in the East African region.

The system architecture of the C-27J Next Generation ensures a cost-effective solution for all the tactical operational requirements expressed by the market. Thanks to the versatility of the platform, the C-27J can in fact be rapidly reconfigured, by means of kits and roll-on/roll-off mission systems in the configuration necessary to carry out defence and civil protection missions, in line with emerging market demands. A wide spectrum of aircraft configurations, including fire-fighting, Maritime Patrol (MP), C3ISR, and special operations.

The global fleet of C-27J aircraft also recently achieved the milestone of 250,000 flight hours. Chosen by military operators in 17 countries worldwide, the C-27J has been deployed since its entry into service into the most challenging terrains, environmental and operating contexts, from the Andes to Afghanistan.

The last country to receive the tactical transport aircraft was Slovenia, which received the first of two aircraft on order on 20 December 2023.

Italian Ambassador to Tanzania, Marco Lombardi, attended the signing ceremony of the contract. He was joined by Tanzanian Minister of Defence and National Service, Stergomena Tax.

Together with Claudio Sabatino and Claudio Gelain of Leonardo, Ambassador Lombardi said he was thankful and satisfied for the first relevant result of the Italian System in Tanzania in 2024.

He thanked all those who, with their contribution, had contributed to the achievement of this objective.



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GEARING UP FOR CLUJ-NAPOCA

The third chapter of Aviation-Event CLJ is due to take place on March 15 and promises a range of speakers who will draw the guidelines for supporting the development of civil aviation in the current aviation ecosystem context.

The civil aviation leaders will meet in Cluj-Napoca to address key topics such as the best practices for incorporating sustainability into aviation for the future, operational safety and efficiency, and also issues concerning the current geopolitical scenario.

The occasion follows two previous Aviation-Event conferences hosted by the Cluj International Airport – the first which took place in March 2022.

This gathering saw more than 150 participants and featured global leaders in the civil aviation sector, experts, stakeholders and media representatives from approximately 20 countries.

The speakers included; Luis Felipe de Oliveira - general director of ACI World, Adina Vălean - European commissioner for transport, József Váradi - CEO of Wizz Air, Rafael Schwartzmann - regional vice president of IATA Europe, Vasile Dîncu - minister of national defence of Romania, and many others.

The purpose of the event was to bring together the leaders of the European aviation industry to present development perspectives of civil aviation from an international level, in the

post-pandemic context, and to address the need to adapt to an ever-changing aeronautical landscape.

The second conference, namely Aviation-Event 2023 CLJ presented an opportunity for aviation specialists all over the world to address issues such as decarbonisation, digitalisation, customer service, sustainability, operational resilience, and disruptions. Among the top speakers were; Olivier Jankovec (director general ACI Europe), József Váradi (CEO Wizz Air), Marian-Jean Marinescu (MEP, European Parliament), Jost Lammers (CEO Munich Airport) and Costin Iordache (CEO - TAROM).

The last decades, Cluj International Airport has evolved from early beginnings with just 32,000 passengers. It was registered in 1996 and achieved the historic milestone of 3,2 million passengers in 2023.

This shows Cluj International Airport's resilience having maintained its position as the top regional airport in Romania.

Despite pandemic setbacks, Cluj International Airport has exceeded European averages in passenger recovery 2023, ending the year with a remarkable 23% increase in passenger traffic compared to 2022, and 111% recovery rate compared to 2019 levels.

More recently Cluj International Airport has developed multiple projects with European funding aimed at increased safety, enhanced operational efficiency, and increased passenger experience. By leveraging these funds, Cluj International Airport aims to create an airport infrastructure that anticipates future growth and contributes to the economic and social development of the entire region.

The goal is to develop a forward-thinking strategy and sustainable air travel hub in the years to come.



REVOLUTIONISING PERSONAL AVIATION

Pioneering advancements in aviation, Cirrus, renowned for introducing aircraft equipped with parachutes and the Vision Jet capable of autonomous landings, has unveiled the latest evolution in its high-performance, single-engine piston aircraft series – the SR Series G7. This groundbreaking release, featuring cutting-edge touchscreen interfaces, expansive high-resolution displays, and advanced safety systems, marks a significant transformation both inside and out.

The SR Series G7 boasts a host of enhanced convenience features, including improved visibility, increased legroom, and a redesigned interior. The incorporation of a Cirrus IQ mobile app provides users with remote access to real-time health and readiness indicators for their aircraft, ensuring faster, safer, and more intelligent travel.

Drawing inspiration from the Vision Jet, the 2024 models - SR20, SR22, and SR22T - have successfully completed FAA type certification, signalling their readiness for delivery. At the heart of these updates lies the reimagined Perspective Touch+ integrated flight deck, featuring 12- or 14-inch high-resolution displays and twin GTC touchscreen controllers, mirroring the functionality and redundancy of the Vision Jet SF50.

The push-button interface for engine start, reminiscent of the SF50, streamlines operations while maintaining the ability to check mags and set mixture. This cohesive approach extends across cabin experiences and training programs, offering a seamless progression from learning to fly a SR Series aircraft to eventually piloting a Vision Jet.

Zein Nielsen, CEO of Cirrus Aircraft, emphasized the company's mission to increase participation in aviation, providing individuals with the freedom, productivity, and joy it offers. The comprehensive ecosystem developed by Cirrus

ensures a seamless ownership experience, from global sales to flight training, maintenance, and support.

Pat Waddick, President of Innovation and Operations at Cirrus Aircraft, highlighted the SR Series G7's incorporation of new avionics, autonomous interfaces, and enhanced styling and comfort. This collaborative effort between customers, innovation, and operations resulted in an aircraft with technological advancements, making flying truly exceptional.

KEY FEATURES OF THE SR SERIES G7

The SR Series G7 stands out as the first piston aircraft to feature dual Garmin Touch Controllers. The Perspective Touch+ offers larger, high-resolution displays with expanded systems integration, providing a more intuitive flight deck experience and enhancing situational awareness.

The reimagined interior elevates the inflight experience for both pilot and passengers, offering auto-inspired features and ergonomics. Modernized features such as Push Button Start and Automatic Fuel Selector System simplify operations, while redesigned interior panels incorporate dimmable task lights and ambient accent lighting.





Additional features include sturdy cup holders, ample pockets, and centre console compartments for enhanced organization, along with Powered Headset Jacks and Lighted High-Power USB-C outlets for connectivity during flight.

ADVANCED SAFETY SYSTEMS AND DESIGN

In addition to the standard Cirrus Airframe Parachute System, the SR Series G7 introduces advanced safety features, including Stick Shaker for heightened low-speed situational awareness, Flap Airspeed Protection to monitor and protect

against inadvertent flap deployment or retraction, and Taxiway Routing and 3D Safe Taxi for increased awareness in airport environments.

FLIGHT TRAINING EXCELLENCE

Cirrus continues to set new standards in modern flight training with the SR Series G7, forming a partnership with Western Michigan University College of Aviation. The collegiate program will soon take delivery of the TRAC20, further cementing Cirrus's commitment to advancing aviation education and training.

REVEALING THE X-59

Lockheed Martin Skunk Works have rolled out the X-59, a unique experimental aircraft designed to quiet the sonic boom, at a ceremony in Palmdale, California.

collaboration and innovation that has stemmed from years of research, development and production of a one-of-a-kind technology demonstrator aircraft that will reduce the loudness of sonic booms to a gentle thump.

"The entire X-59 team leaned into the expertise of both legendary organisations, NASA and Lockheed Martin, to ensure success for this programme. I am extremely proud of everyone who made this historic moment possible," said Greg Ulmer, executive vice president, Lockheed Martin Aeronautics.



The event marked a significant milestone in Lockheed Martin's and NASA's decades-long journey.

"We're thrilled to take on this challenge alongside NASA, whose quiet supersonic technology mission will have lasting, transformational impacts for people around the world," said John Clark, vice president and general manager, Lockheed Martin Skunk Works.

"This project is just one example of the broader ingenuity of our industry as we continually strive to push the envelope of what's possible."

The ceremony celebrated technical advancements,

Next, the aircraft will complete ground tests including engine-run and taxi tests before its next major milestone, first flight, later this year.

After the aircraft is validated in initial flight tests, it will move into the acoustic testing phase. This phase will include flights over populated areas to provide US and international regulators with statistically valid data required to help approve new rules that could allow quiet commercial supersonic flight over land. This would cut commercial flight times to half of what they are today, transforming travel for people around the world.



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P2 Zipline's P2 delivery droid uses fans and onboard sensors to autonomously guide packages into tight locations. [Courtesy: Zipline]

DALLAS-FORT WORTH DRONE DELIVERY SERVICE

The world's largest retailer just announced what it claims to be the biggest drone delivery expansion of any US company.

Walmart - which uses drones from partners such as Zipline and Wing to deliver within minutes to customers nationwide has said it would add 1.8 million households to its Dallas-Fort Worth service area, which will soon cover three-quarters of the area's population.

According to the retailer, no US company has offered drone delivery to as many households in a single market.

The expansion adds stores in 30 towns and municipalities to Walmart's existing Dallas-Fort Worth service, which itself is part of a network spanning nearly 40 hubs in seven states.

Zipline and Wing, both of which were recently approved by the FAA to fly their drones beyond the visual line of sight (BVLOS) of a visual observer, will power the deliveries.

The companies' new permissions - part of an FAA push to grow the industry within the US - will allow them to fly further than previously permitted.

"Customers will have access to a broad assortment of items from Walmart available for delivery to their home in just minutes," said Prathibha Rajashekhar, senior vice president of innovation and automation for Walmart US.

"Drone delivery is not just a concept of the future, it's happening now and will soon be a reality for millions of additional Texans."

Walmart said Dallas-Fort Worth customers can expect the buzzing aircraft to arrive in as little as 10 minutes but no more than 30. Across two years of trials, the retailer has completed more than 20,000 deliveries of items such as snacks,

beverages, and cold medicines, including fragile cargo such as eggs. Thousands of items are eligible for drone delivery, but customers must be within 10 miles of a store offering the service.

Zipline has worked with Walmart since 2021 and is actually the world's largest drone delivery provider by sheer volume. The company said the expansion will allow it to serve 1,000 times as many Walmart customers.

For the past two years, it's delivered from a store in Arkansas, where it says customers now perceive operations as "totally normal."

By the time Zipline and Walmart begin an operational pilot later this year, the company expects to have completed tens of thousands of trials with Platform 2 (P2), its next-generation delivery system.



A Wing drone flies through the skies of Dallas-Fort Worth with a delivery from Walmart. [Courtesy: Walmart]



Wing drones have spent the past four months delivering Walmart packages in Dallas-Fort Worth. [Courtesy: Wing]

Among other things, P2 will introduce a modified drone, docking, charging, and delivery infrastructure for businesses, and an autonomous droid capable of guiding packages to spaces as small as a patio table. It aims to automate more tasks for customers and enable more precise drop-offs than the company's existing system, which uses a parachute.

"Autonomous delivery is finally ready for national scale in the U.S." said Keller Rinaudo Clifton, co-founder and CEO of Zipline.

"Zipline is excited to enable Walmart's vision of providing customer delivery so fast it feels like teleportation...We're excited for folks across Dallas-Fort Worth to experience delivery that is seven times as fast, zero emissions, and whisper quiet."

Like Zipline, Wing, a subsidiary of Google parent Alphabet, has spent the past few years developing its US network with

Walmart.

With four months of service in Dallas-Fort Worth with Walmart, customers have been clamouring for more, with the top 25 percent of customers ordering twice per week on average, Wing said. Sustainability is a proposition to customers, but so is speed—the company's drones typically spend just five minutes in the air during a delivery.

Zipline and Wing were among the first US firms to receive FAA Part 135 air carrier approval, which allows them to fly drones commercially. Only five companies in the space have those permissions, with the others being Amazon Prime Air, UPS Flight Forward, and Causey Aviation Unmanned, the partner of another Walmart collaborator, Israeli manufacturer Flytrex. This story first appeared here: <https://www.flyingmag.com/walmart-adding-2-8-million-households-to-dallas-fort-worth-drone-delivery-service/>

AVIATION FUEL REFINERY STARTS PRODUCTION

Africa's biggest diesel and aviation fuel refinery built by the continent's richest man has started production, the company described it recently as a "big day for Nigeria".

The 650,000 barrel-per-day Dangote refinery could be a game changer when fully operational by helping end Nigeria's reliance on fuel imports.

It is hoped that the delayed megaproject built by Nigerian billionaire Aliko Dangote would have products on the market soon, but it is not clear when the refinery will reach full capacity production or start refining petrol.

The facility sits on 2,635 hectares (6,500 acres) of land at the Lekki Free Zone on the edge of Lagos city and cost an estimated (US) \$19 billion, according to local media.

"Dangote Petroleum Refinery has commenced production of diesel and aviation fuel," the group said. "This is a big day for Nigeria. We are delighted to have reached this significant milestone."

One of Africa's largest oil producers and the continent's top economy, Nigeria relies almost totally on imported fuel and diesel because of a lack of refining capacity.

Nigeria swaps crude worth billions of dollars for petrol that it had subsidised for years to keep prices cheap for its domestic market.

Fuel imports and subsidies causes a huge drain on foreign exchange especially when Nigeria was struggling with dwindling oil revenues and foreign currency shortages.

The refinery, first scheduled to open in 2021, was officially inaugurated by then president Muhammadu Buhari earlier this year and was supposed to begin operations in June. Since coming to office in May last year, President Bola Ahmed Tinubu has ended the long-standing fuel subsidy and floated the naira currency in economic reforms he said will attract foreign investment and build long term growth.

NEW VERSION GRAY EAGLE UAV

By John Keller

US army unmanned aircraft experts are asking General Atomics Aeronautics Systems Inc. in Poway, California (USA) to build MQ-1C-25M Gray Eagle modernised extended-range unmanned aerial vehicles (UAVs) under terms of a (US) \$389 million one-year contract announced recently.

Officials of the army contracting command at Redstone Arsenal, Alabama are asking General Atomics for MQ-1C-25M UAVs for multi-domain operations.

The MQ-1C-25M is the latest version of the MQ-1C Gray Eagle, and is multi-mission, medium-altitude, long-endurance unmanned aircraft for real-time artillery spotting and targeting; and intelligence, surveillance, target acquisition, and reconnaissance.

The army operates the Gray Eagle in each of its 11 combat aviation brigades. The Gray Eagle 25M variant adds an open systems architecture, upgraded sensors, and new communications links.

The Gray Eagle 25M new communications links will include over-the-horizon Ku and Ka-band satellite communications, Link 16, and software-defined ultra-high frequency and very high frequency communication links.

The unmanned aircraft will carry the Eagle Eye radar to detect and track moving targets on land or at sea. It also can have other sensors because of its open-systems architecture.

The new variant also includes a 200-horsepower heavy fuel engine to improve electrical power by about 50 percent. The Gray Eagle 25M is the latest version of the General Atomics MQ-1C Gray Eagle attack drone medium altitude

long endurance unmanned aircraft, which is an upgraded MQ-1 Predator.

The aircraft can be fitted with the AGM-114 Hellfire missile or GBU-44/B Viper Strike guided bomb for attack missions.

The Gray Eagle UAV has a synthetic aperture radar and ground moving target indicator (SAR-GMTI) system, and targeting capability from an AN/AAS-52 multi-spectral targeting system (MTS) under the nose.

The aircraft can carry a payload as heavy as 800 pounds. The MQ-1C Gray Eagle provides reconnaissance, surveillance, and target acquisition; command and control; communications relay; signals intelligence; electronic warfare; attack; detection of weapons of mass destruction; battle damage assessment; and manned and unmanned teaming capabilities.

Compared with its MQ-1 Predator predecessor, the Gray Eagle has an increased wingspan, and a Thielert Centurion 1.7 heavy-fuel engine (HFE) able to burn jet and diesel fuel. The UAV can fly for as long as 36 hours at altitudes to 25,000 feet. It has an operating range of 200 nautical miles.

Army commanders deploy the Gray Eagle UAV in platoons, each with four aircraft, support equipment, and payloads like electro-optical/infrared/laser range finder/laser designator; communications relay; and as many as four hellfire missiles.

The common sensor payload and synthetic aperture radar ground moving target indicator are one per aircraft.

Ground equipment per platoon includes two universal ground control stations; three universal ground data terminals; one satellite communication ground data terminal; and one mobile ground control station per company.

On this contract General Atomics do the work at locations to be determined with each order, and should be finished by November.



The MQ-1C-25M is the latest version of the MQ-1C Gray Eagle, and is multi-mission, medium-altitude, long-endurance unmanned aircraft. Photo credit: photo supplied



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TAKING FLIGHT WITH RESPONSIBILITY

Business jets, long associated with luxury and exclusivity, are facing a growing demand for greater sustainability.

As the world grapples with climate change and environmental concerns, business jet manufacturers are stepping up to the challenge by developing innovative technologies and practices that minimize their environmental impact.

RISING ENVIRONMENTAL CONCERNS

The aviation industry, including business jets, contributes significantly to greenhouse gas emissions and noise pollution. This has sparked public scrutiny and prompted governments to implement stricter regulations. In response, business jet manufacturers are actively exploring ways to reduce their environmental footprint and ensure the long-term viability of their industry.

Several key areas are at the forefront of sustainability efforts in business jet manufacturing:

- **Fuel Efficiency:** Manufacturers are constantly seeking ways to improve fuel efficiency through aerodynamic design optimisation, lightweight materials, and advanced engine technologies. For example, Gulfstream's G700 boasts a 20% reduction in fuel burn compared to its predecessor, the G650.
- **Alternative Fuels:** Sustainable aviation fuels (SAF) are a promising alternative to conventional jet fuel. SAFs are derived from renewable sources like biomass and offer significant reductions in greenhouse gas emissions. Airbus has successfully tested a blend of 50% SAF on its A350 aircraft, demonstrating the feasibility of sustainable fuels for business jets.
- **Electric and Hybrid Propulsion:** While still in its early stages, electric and hybrid propulsion technologies hold immense potential for decarbonising aviation. Several companies, including Airbus and Embraer, are developing electric and hybrid business jets, with some models expected to enter service in the coming years.
- **Noise Reduction:** Aircraft noise is another significant environmental concern. Manufacturers are implementing technologies like quieter engines and optimized flight profiles to minimize noise



Dassault 10X: Perhaps what makes Falcons more environmentally responsible business jets is the philosophy of efficiency that is built into every element of design. That means reducing aircraft drag and weight through cutting-edge design.



Gulfstream G700: Gulfstream's G700 boasts a 20% reduction in fuel burn compared to its predecessor, the G650.

pollution. Embraer's E2 family of jets, for example, offers a 65% reduction in noise footprint compared to previous generation aircraft.

- **Sustainable Manufacturing:** Beyond aircraft design and operation, business jet manufacturers are also focusing on sustainable manufacturing practices. This includes reducing energy consumption, minimizing waste, and using recycled materials. For instance, Dassault Aviation has invested in eco-friendly practices at its production facilities, including a solar panel array that provides 10% of the energy needed for its Falcon jet assembly line.

Yet despite these significant advancements, challenges remain in achieving true sustainability in business jet manufacturing. These include:

- **High cost of development and implementation:** New technologies and sustainable practices often come with

a higher price tag, making them less accessible for smaller manufacturers.

- **Limited availability of sustainable aviation fuels:** SAFs are not yet widely available, making it difficult for airlines to rely on them as a primary fuel source.
- **Infrastructure limitations:** Current airport infrastructure may need upgrades to accommodate electric and hybrid aircraft, such as charging stations and ground handling equipment.

With continued research, collaboration, and embracing innovation, business jet manufacturers can ensure their industry thrives in a future focused on sustainability and they can play a leading role demonstrating that progress and responsibility can go hand-in-hand.



Embraer's E2 family of jets, for example, offers a 65% reduction in noise footprint compared to previous generation aircraft.

A HELICOPTER FLIES USING A TABLET

Airbus in Toulouse, France, have successfully completed a test flight using a new simplified human machine interface (HMI) and advanced autonomous features through a project code-named Vertex.

These technologies, developed by Airbus UpNext, are controlled by a touchscreen tablet and aim to simplify mission preparation and management, reduce helicopter pilot workload, and further increase safety.

The Airbus Helicopters' FlightLab flew fully automated from lift-off, taxi, take off, cruise, approach and then landing during a one-hour test flight by following a predefined route.

During this flight, the pilot monitored the system which can detect unforeseen obstacles and automatically recalculate a safe flight path.

Whenever necessary the pilot can easily override the controls through the tablet and resume the mission afterwards. The flight test period ran from 27 Oct through 22 Nov last year at the Airbus Helicopters' facility in Marignane, France.

The Vertex project works on autonomous technologies, utilising vision-based sensors and algorithms for situational

awareness and obstacle detection; fly-by-wire for enhanced auto-pilot; and an advanced human-machine-interface.

Airbus says that the combination of these technologies will enable a system that can manage navigation and route preparation, automatic take-off and landing, as well as following a predefined flight path.



The Airbus Helicopters' FlightLab flew fully automated from lift-off, taxi, take off, cruise, approach and then landing during a one-hour test flight by following a predefined route. Photo credit Airbus.



ACI World Chair and CEO of CVG Candace McGraw.

CANDACE MCGRAW TAKES THE HELM: FIRST WOMAN TO CHAIR ACI WORLD GOVERNING BOARD

In an historic move, Candace McGraw has ascended to the position of ACI World Chair, making her the first woman to lead the influential ACI World Governing Board (WGB). As the CEO of Cincinnati/Northern Kentucky International Airport (CVG), McGraw brings a wealth of experience to her new role, where she will guide the WGB, comprised of 28 top airport CEOs, through strategic discussions on critical subjects shaping the global aviation landscape.

At the core of McGraw's priorities is a steadfast commitment to ensuring that ACI World maintains its status as the authoritative voice of the world's airports. Emphasizing the importance of advancing the organization's mission – contributing to the safety, security, and sustainability of the global aviation industry – McGraw underscores the need for all efforts to align with this noble purpose. She also highlights the pivotal role ACI plays in collaborating with global regulatory bodies, such as the International Civil Aviation Organization (ICAO), and outlines the preparations for the crucial 2025 ICAO Assembly.

Acknowledging the upcoming departure of ACI World's director general, Luis Felipe de Oliveira, McGraw prioritizes a thorough and transparent recruitment process to ensure the appointment of a dynamic and respected leader. This commitment underscores her dedication to the ongoing

success of ACI World and the continuation of its vital work in shaping the aviation industry.

Drawing on lessons learned from the pandemic, McGraw stresses the significance of collaboration within the aviation industry. Her aim is to position ACI World as an equal and trusted partner to international organizations such as ICAO, IATA, and the World Health Organization (WHO). Recognizing the strength that comes from unity, McGraw envisions a future where shared efforts address challenges ranging from safety and climate action to workforce training and health concerns.

Originating from ACI-North America, she expresses her commitment to ensuring that ACI World responds effectively to the diverse needs of all ACI Federation regions. From Africa and Asia-Pacific to Europe and Latin America-Caribbean, she emphasizes the importance of each region's active engagement, highlighting shared goals related to safety, enhanced travel experiences, and local economic prosperity.

Addressing the pervasive challenge of workforce shortages in the aviation industry, McGraw aims to position ACI as a thought leader and resource in promoting inclusive workforce development, participation, and retention. By collaborating with industry partners and stakeholders, ACI under McGraw's leadership is poised to spearhead efforts and programs that ensure a place for everyone within the aviation ecosystem. In her concluding remarks, McGraw emphasizes the broader purpose of airports – not merely as facilitators of travel but as drivers of regional economic well-being, fostering job opportunities and maintaining global relevance for communities worldwide.

*This article is shortened. To read the full article please click here: <https://blog.aci.aero/the-top-5-priorities-of-the-first-woman-to-chair-aci-world-ms-vandace-mcgraw/>



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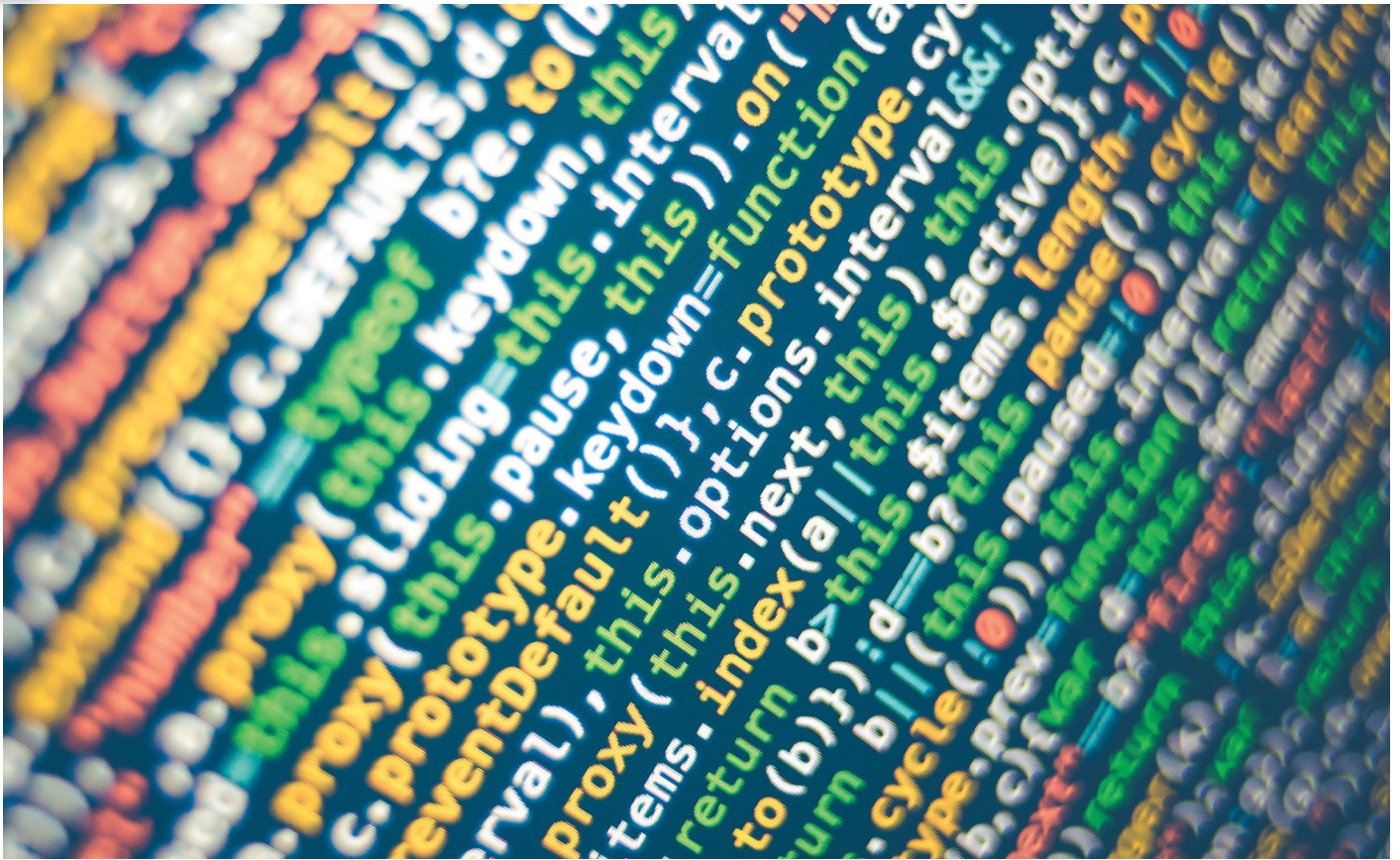
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TRANSFORMING DATA

In recent years, the aviation industry has witnessed a paradigm shift in the way data is managed and secured, thanks to the adoption of blockchain technology.

Unlike traditional centralised systems that are susceptible to cyberattacks, blockchain offers a decentralised and secure approach to storing and managing data.

This revolutionary technology is reshaping the aviation landscape, providing enhanced data traceability and streamlined identity management.

How blockchain is making significant strides in ensuring the integrity, security, and efficiency of aviation operations is unpacked as well as the specific applications for enhanced security in aviation and the challenges that must be addressed in its successful implementation.

DECENTRALISED AND SECURE DATA STORAGE

One of the fundamental advantages of blockchain in aviation is its decentralised nature. Unlike centralised systems that rely on a single point of control, blockchain distributes data across a network of nodes.

This inherent decentralisation makes it exceptionally challenging for malicious actors to tamper with or corrupt data. In an industry where data integrity is paramount, this feature of blockchain ensures that information remains secure and trustworthy.

By leveraging a distributed ledger, blockchain fosters a higher level of trust among stakeholders in the aviation ecosystem.

The decentralised architecture minimises the risk of a single point of failure, enhancing the overall resilience of the system against potential cyber threats.

This not only safeguards sensitive data but also instils confidence in passengers, regulators, and industry partners.

ENHANCED DATA TRACEABILITY

Blockchain's ability to provide an immutable record of data transactions brings a new level of transparency to the aviation sector. Every piece of data, from maintenance records to flight schedules, is securely recorded in a tamper-proof manner. This feature is particularly beneficial for tracking and tracing data throughout the aviation ecosystem.

With enhanced data traceability, aviation professionals can quickly identify and address issues that may arise during operations. Whether it's tracking the maintenance history of an aircraft or verifying the authenticity of crucial documents, blockchain's transparency ensures a comprehensive and realtime view of the entire data lifecycle. This not only improves operational efficiency but also contributes to the overall safety and accountability of the aviation industry.

STREAMLINED IDENTITY MANAGEMENT

Identity management is a critical aspect of aviation security, and blockchain is revolutionizing how airlines handle passenger and crew credentials. By integrating digital identities with blockchain technology, airlines can establish a secure and efficient system for verifying the identity of individuals involved in aviation operations.

The decentralised nature of blockchain eliminates the need for a centralised authority to manage identity data.

Passengers and crew members can have greater control

over their digital identities, reducing the risk of identity theft and fraudulent activities.

This streamlined identity management not only enhances security at airports but also improves the overall passenger experience by simplifying check-in and boarding processes.

APPLICATIONS FOR ENHANCED SECURITY AIRCRAFT MAINTENANCE TRACKING

Blockchain's ability to create secure, tamper-proof records makes it an ideal solution for tracking an aircraft's maintenance history. The technology can capture details such as parts used, repairs performed, and personnel involved, ensuring transparency in data. This not only aids in identifying potential safety risks but also helps airlines stay compliant with stringent regulations governing aircraft maintenance.

CARGO SECURITY AND TRACKING

The real-time tracking capabilities of blockchain prove invaluable in securing and monitoring cargo movements across the supply chain. From the point of origin to the final destination, blockchain can provide a transparent and unalterable record, mitigating risks such as theft, loss, and counterfeiting. This application ensures the secure and efficient delivery of critical cargo, a vital consideration in the aviation industry.

TRAVEL DOCUMENT VERIFICATION

Integrating travel documents with blockchain enhances the verification process, reducing the risk of fraud. By establishing an immutable record of travel documents, airlines can streamline the verification process, making travel more efficient for passengers while bolstering security measures at airports.

CHALLENGES AND CONSIDERATIONS

Despite the promising applications of blockchain in aviation, several challenges must be addressed for successful implementation such as standardisation and Interoperability. The aviation industry involves multiple stakeholders, each potentially using different blockchain platforms. Achieving seamless data sharing and collaboration requires the establishment of industry-wide standards for blockchain technology. This standardisation is essential to ensure that all participants in the aviation ecosystem can benefit from the enhanced security and transparency offered by blockchain.

Then there is the issue of scalability. The aviation industry generates vast amounts of data daily. Implementing blockchain at scale demands significant technical advancements and infrastructure investments to manage these large volumes of data effectively. Ensuring the scalability of blockchain solutions is crucial for them to meet the demands of a dynamic and data-intensive industry.

As blockchain technology evolves, so does the regulatory landscape surround its implementation. Airlines must navigate these evolving regulations to ensure compliance and avoid legal hurdles. Staying informed about regulatory developments and actively participating in shaping the regulatory framework will be crucial for the successful integration of blockchain in aviation.

Blockchain technology holds immense promise for fortifying security in the aviation industry. From maintaining aircraft records to securing cargo movements and verifying travel documents, the applications are diverse and impactful.

However, the successful integration of blockchain requires a concerted effort to address challenges related to standardisation, scalability, and regulatory compliance.

As the industry works towards overcoming these hurdles, the potential benefits of enhanced security, transparency, and efficiency make blockchain a compelling force in shaping the future of aviation.

FREQUENT VISITOR



Spanish capacity provider Wamos Air will be flying this Airbus A330-343E registered EC-NTY on behalf of Saudia. It was seen at Safi Aviation Park in this Eurowhite scheme after flying into Malta International Airport in hybrid AirAsia X colours. The twinjet was originally delivered to the Malaysian carrier in February of 2015 before moving to the Spanish register. Wamos Air was built on the remnants of Air Pullmantur and was a frequent visitor to the island on Fly & Cruise charters. Photo credit to Mario Caruana / MAviO News



WHAT THE ALASKA AIRLINES INCIDENT TELLS US ABOUT FLIGHT SAFETY

By Hassan Shahidi

With no reported fatal accidents involving large commercial jets in scheduled service, 2023 has been widely hailed as one of the safest years in the history of aviation.

And the air transport system is safe. But the aviation system and its safety margins are showing signs of stress. But the aviation system and its safety margins are showing signs of stress.

In the United States, there were nearly two dozen serious runway incursions in 2023, up from 16 the previous year.

Thankfully, none of those events ended in a fatal accident. However, tragedy did strike last week when a Japan Airlines Airbus A350 collided with a much smaller Japan coast guard aircraft on a runway at Tokyo's Haneda Airport. All 379 passengers and crew on the airliner escaped due largely to the professionalism and training of the crew, but five of the six people on board the coast guard aircraft were killed.

Just a few days later, an Alaska Airlines Boeing 737 Max 9 made an emergency landing in Portland, Oregon, after a door plug blew out of the fuselage shortly after take-off, causing rapid depressurization of the passenger cabin. No serious injuries were reported.

These recent events serve as critical reminders of the dynamic and evolving nature of the aviation system, where constant vigilance and continuous improvement are essential to maintain the highest levels of safety and public trust.

Both regulators and the aviation industry must heed the recent warning signs and recommit to maintaining the highest standards and quality to build an even more resilient aviation system.

Perhaps most urgent is staffing. As air traffic has rebounded from the downturn caused by the Covid-19 pandemic, the aviation industry continues to face a significant challenge: the departure of thousands of trained and experienced professionals, such as pilots, maintenance technicians, air traffic controllers and other safety-critical personnel.

This exodus, which largely stems from retirements, has led to a significant turnover in the aviation workforce, which is particularly concerning given that achieving the highest levels of safety requires qualified and trained personnel. Aviation stakeholders, including airlines and the Federal Aviation Administration, must focus on recruiting and effectively training new personnel. That will help to relieve pressure on existing staff and (eventually) make up for the lost expertise.

Also important is the adoption of systems that enhance pilot and air traffic controller situational awareness - especially on airport surfaces like runways and taxiways - and build additional layers of safety in an environment that is increasingly complex.

These systems include cockpit-based displays that provide pilots with timely alerting to potential hazards. Similarly, for air traffic controllers, radar-based technologies, such as those installed at some busy airports in the US, provide a significantly improved picture of aircraft movement on runways, taxiways and ramps, especially in low visibility conditions.

Some of the advanced capabilities, particularly those designed for air traffic controllers, could be deployed more widely if funds were allocated by Congress. For cockpit-based systems, the standards have been slow to mature.

Lastly, better safety data analysis and information sharing across the aviation community can proactively identify potential risks that might lead to safety incidents.

These are indicators that, while not causing direct harm, can signal potential risks or vulnerabilities that might lead to safety incidents if unaddressed. Examples include altitude deviations, patterns of pilot and controller fatigue and equipment and part wear and tear.

This data enables airlines, regulators, manufacturers and other industry stakeholders to respond swiftly to new potential safety issues. This cooperative approach ultimately fosters a more effective safety culture within the aviation industry.

We stand at an inflection point in the evolution of aviation safety, poised to elevate it to unprecedented levels. The confluence of technological innovation, commitment to the highest levels of quality, deeper understanding of human factors and a collaborative safety culture marks a unique opportunity to redefine what safety means in the skies, to push the boundaries of what we have achieved so far.

By harnessing the collective expertise, commitment and vision of the entire aviation community, we can propel aviation safety into a new paradigm, where continuous improvement and adaptability are not just ideals, but practical realities.

This moment is not just about maintaining our impressive safety record; it's about envisioning and creating a future where aviation safety is more resilient, more intuitive and more integrated than ever before.

With leadership and working together, the aviation community can make an already safe system even safer.

This article first appeared here: <https://edition.cnn.com/2024/01/12/opinions/alaska-airlines-flight-safety-shahidi/index.html>



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