

WORLD AIR NEWS

AFRICA'S OLDEST AVIATION MAGAZINE



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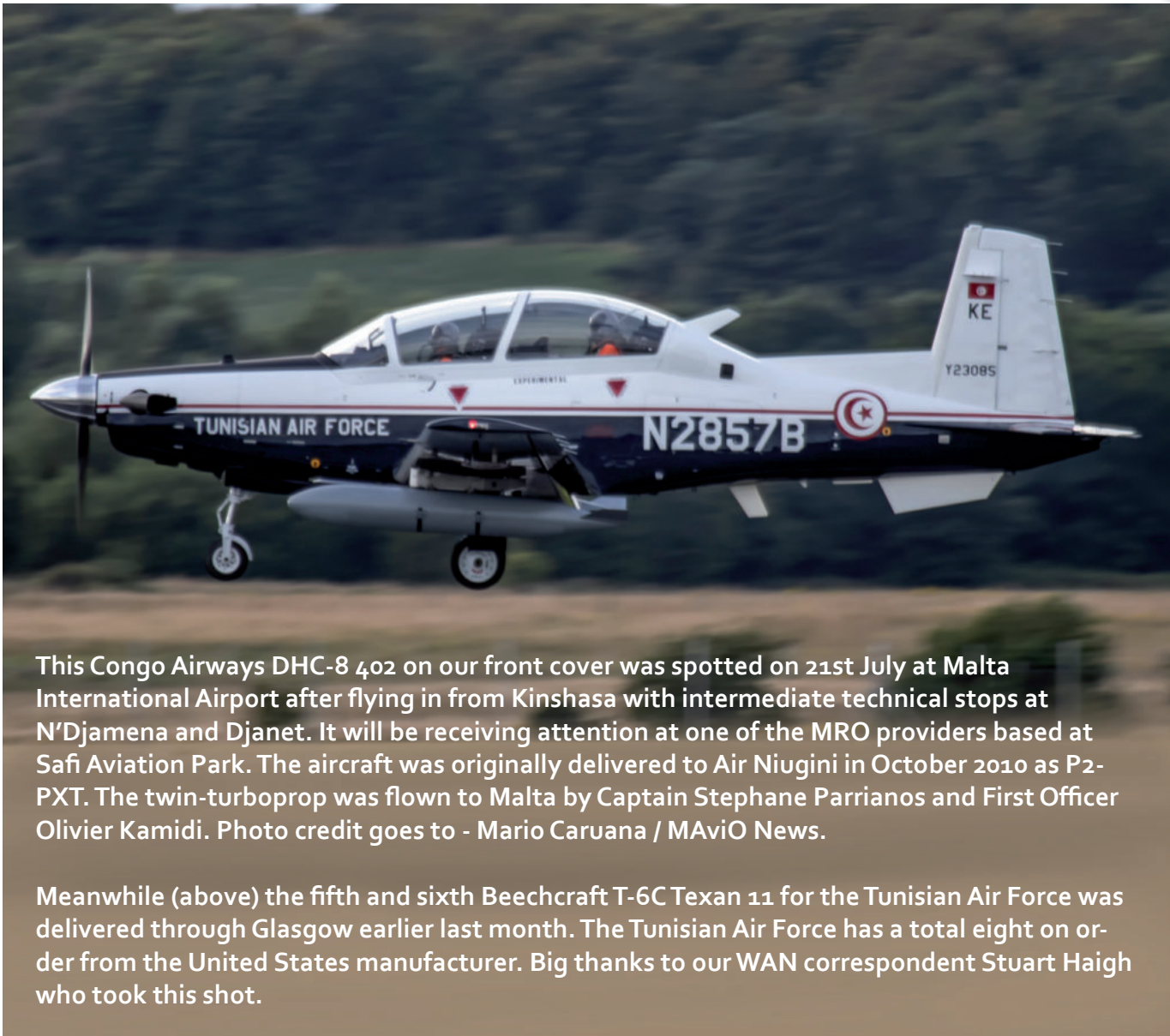
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This Congo Airways DHC-8 402 on our front cover was spotted on 21st July at Malta International Airport after flying in from Kinshasa with intermediate technical stops at N'Djamena and Djanet. It will be receiving attention at one of the MRO providers based at Safi Aviation Park. The aircraft was originally delivered to Air Niugini in October 2010 as P2-PXT. The twin-turboprop was flown to Malta by Captain Stephane Parrianos and First Officer Olivier Kamidi. Photo credit goes to - Mario Caruana / MAviO News.

Meanwhile (above) the fifth and sixth Beechcraft T-6C Texan 11 for the Tunisian Air Force was delivered through Glasgow earlier last month. The Tunisian Air Force has a total eight on order from the United States manufacturer. Big thanks to our WAN correspondent Stuart Haigh who took this shot.

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AIRLINE IN A BOX



Dainius Staniulis, vice president of Avion Express.

Avion Express is a leading ACMI business, based in Lithuania. It was recognised by a leading newspaper Verslo Žinios as one of the TOP-20 Lithuanian Most Desirable Employers of 2019.

So why would Avion Express be interested in African-based airline operators. Heidi Gibson spoke to Dainius Staniulis, vice president of Avion Express.

WAN: Thank you for agreeing to this interview. Your time is appreciated. Can we start with a brief description of who you are, the portfolio you hold in Avion Express, and a bit of your career background?

DS: I am a father of three, based in Vilnius, Lithuania. I have a BSc in Business Administration at the University of Bath and

an EMBA from the Baltic Management Institute in Lithuania. I have spent a majority of my career in banking until I joined Avion Express in 2018. As a result, I am over 5 years in aviation and I am still learning and enjoying every day of it.

My duties at Avion Express encompass the supervision, coordination and responsibility of commercial and business development function which is all about customers, sales, relationship development and, last but not least, revenue generation.

WAN: Can you give our readers a brief overview of Avion Express operations in Europe and any other country - perhaps in another continent?

DS: Avion Express is a globally leading ACMI (wet/damp lease) provider with a fleet of 55 Airbus A320 family aircraft in September 2023. We have two AOCs (Lithuania and Malta) and are in the market for over 18 now.

We provide our services worldwide – in Europe, Africa, Asia, and the Americas. Our list of customers currently and in the past includes but is not limited to the following airlines: Eurowings (Lufthansa Group), LOT, Norwegian,

WAN: In a continent where a large number of operators are managing fleets such as the old Boeing 737s - some 20 to 30 years old - why is Avion Express interested in doing business in Africa – when your fleet is made up of only the Airbus A320?

DS: We understand the fleet composition in Africa and there are plenty of Airbus operators too. Actually, a good aspect of ACMI is that it does not matter what fleet the customer operates. As you can see from a list of our customers, quite a few of them are Boeing operators. Since we provide crews



and take care of maintenance, this does not clash with the customer's fleet. In terms of the aircraft age that you have mentioned, our fleet is younger than the age you have provided, therefore, this can bring certain advantages for the customers as well.

WAN: Are you hoping to change these fleets over to a new aircraft type? How will you do this?

DS: To add to the question above, Avion Express plans to continue our growth with the same A320 family type of aircraft going forward.

WAN: Who are your target audience in Africa and what specific solution can you offer them? Can you perhaps use one example of such a solution and provide some facts and figures that best illustrate the problem that could solve? It does not have to be based in Africa.

DS: Our target audience are the airlines since we provide B2B services to them. This includes airlines operating both, Airbus and Boeing narrow bodies, as well as potentially other operators with smaller aircraft but willingness to expand into larger jets and/or open or try out new markets, routes, etc. We can offer our experience and guidance towards a successful ACMI product and we can start operating very quickly with our solution. In short, it is a flexible capacity solution which limits the amount of long-term leases and costs associated with it in a seasonal market.

As an example, certain countries have peak demand periods for a certain period of time (e.g. 2-6 months) where airlines could fly and earn more but are limited to the capabilities and size of their own fleet. It also does not make sense to employ a long-term dry lease since airlines would

experience overcapacity and inefficient cost structure during the other periods of the year with lower demand. In such case, we can assist with our capacity to utilize the existing market demand and extract the most revenue and profit for the airline while maintaining their fixed cost structure at a more efficient level.

Another example is for, say, regional airlines with regional jets which may have some higher demand markets with a need to larger capacity. We can provide this for a relatively short period of time in order to test the market and the routes which can be continued afterwards.

WAN: I can see that many of the solutions are geared towards commercial airline operators, are there any other markets that you are targeting? What are these?

DS: We are B2B providers for the airlines, therefore, our key target is passenger airlines. On the other hand, Avion Express is opening an AOC in Brazil where we may operate cargo aircraft as well, therefore, this means apart from the airlines, we would be interested to provide cargo charter flights for other companies such as retail or electronic trading platforms (e.g. Amazon) which have large amounts of cargo to be moved.

WAN: Africa presents many challenges - one of which will be financial - does Avion Express have any particular solutions that you can offer start-ups or even long-established operators?

DS: Financial or payment challenges and risks related to it are always there. It is natural that higher risk transfers to higher return, therefore, customers with a worse risk profile

may expect higher pricing. At the same time, standard global practice is cash deposits to ascertain the customer's financial obligations. The higher the risk, the larger the deposits are. This has to be accepted and understood by airlines as someone like Avion Express, being as flexible as they are, may actually provide capacity even if the Lessors do not do that, but certain financial security has to be provided accordingly.

WAN: What criteria do you take into account when assessing the risk profile of such operators? Can you offer flexibility? How strict are you?

DS: We look at many aspects starting from country/city/airport risk related to security, as well as the airline risk. When evaluating the airlines, we investigate many factors, such as the set-up, financial stability, investors/shareholders, the team behind the airlines and other important factors that could lead to success or failure of the airline. Indeed we offer flexibility and operating in some markets may pose larger challenges, but we remain flexible and take each opportunity on a case-by-case basis.

WAN: I heard your ACMI business described as an "Airline in a Box" during the recent AviaDev Africa conference. Would you agree with this simplistic

description – if not what words would you use to describe your business?

DS: Most likely this is a good definition as we offer a "plug and play" solution for airlines where we can come into the base very quickly and start flying within days. By using our solution the customers not only get performed flights and passengers transferred with high quality, but also our experience and expertise of operating an airline globally for over 18 years.

Therefore, our processes and advice on various level could be of huge importance and significance for our customers who are willing to learn and improve. This is the same at our end where we always try to have as many discussions with our customers on various levels and learn at every opportunity that we have.

WAN: Do you have any specific projects that you can talk about here?

DS: Africa is a very interesting continent for aviation development carrying enormous potential and we can already see some countries where ACMI would be a great solution for local airlines. We would be happy to discuss any interest airlines may have, hopefully leading to a mutually beneficial outcome.

ZIM PASSPORT UPGRADE

Travellers to Zimbabwe will now spend less time processing their documents at the country's ports of entry as government is set to implement an online border management system that will incorporate visa and residence permits.

An integrated information communication technology system will support this new service.

In a similar move, the government has also expedited the rolling out of electronic passport production across the country after it entered into a partnership with a Lithuanian company called Garsu Pasaulis or GP to do this.

Information, Publicity and Broadcasting Services Minister Monica Mutsvangwa said the government had engaged GP to implement the national biometric infrastructure which will produce entry visas and residence permits.

Zimbabwe has issued more than 600,000 passports holding the bearer's biometrics on an electronic chip, clearing a backlog which previous reports trace back as far as 2018.

The new passports are printed by GP with technology from Semlex, and their issuance began in Harare in January, 2022.

The backlog of e-passport applications had reached 400,000 in 2018, and was reportedly down to 184,000 by the end of 2021, when the deal for the new passport was signed.



At the time, President Emmerson Mnangagwa said the new system would be capable of issuing up to 30,000 travel documents per day.

As such passport offices have opened in six provincial centres, including Murehwa and Chitungwiza. Offices in Chipinge and Mwenezi are also slated to open this year.

Meanwhile, Botswana and Zimbabwe have held talks on allowing people to travel between the neighboring nations using their digital identity cards, rather than requiring passports.

FOCUS ON AFRICA

By Heidi Gibson

More recently the International Air Transport Association held a Focus Africa event in Addis Ababa, Ethiopia where head honchos Willie Walsh IATA director general, Yvonne Makolo CEO RwandAir and IATA chair-designate as well as Kamil Al Awadhi IATA regional vice president for Africa & Middle East addressed the media.

Some of the statistics that came out of that briefing make for some interesting reading. Take this one for instance – 80% of the continent's total traffic comes from international carriers. That's a lot of European, American and Middle East players in our backyard. Yet this statistic plays an important role in the recovery of air travel for the region – don't underestimate it.

While many other countries have exceeded 2019 traffic levels – southern Africa as a region continues to lag behind other countries. And analysts are saying we (southern Africa) will only fully recover by 2025.

It's not looking good for us down south. Meanwhile in the North and in the East of Africa they are doing well – in fact leading the recovery. Please read the article about Morocco's and Angola's airport infrastructure developments.

From a financial point of view, Focus Africa revealed, the continent's carriers suffered cumulative losses of (US) \$3.5 billion for 2020-2022 with more, in the region of (US) \$213 million in 2023. This against the fact that carriers last made a profit in 2010. Ouch!

Infrastructure in Africa also comes with a high price tag in many countries. User charges are 8% higher than the industry average. In addition, African carriers had excessive costs in several areas. Take for example in 2021

when aircraft fuel and oil cost accounted for 31.2% of total airline expenses for African carriers and Flight Equipment maintenance and overhaul accounted for 20.2%.

Other concerns include, safety, connectivity, a lack of accurate passenger data programmes and airport infrastructure. You just have to travel through JKIA in Nairobi, Kenya and Murtala Mohammed International airport in Lagos and experience the numerous security checkpoints and passenger processing to understand what this means.

And then there is the issue of blocked funds where governments delay in allowing international carriers access to these much-needed funds. It's crazy.

But all is not lost, IATA launched Focus Africa as a new collaborative initiative, that is pooling together resources from across the aviation value chain, to urgently address critical challenges hindering the advancement of aviation across Africa.

Last month the Collaborative Aviation Safety Improvement Programme or CASIP was supposed to have happened. This would see experts across varying disciplines working together to bring a high level of commercial aviation safety through a data-driven approach. The objective being to reduce the number of accidents and incidents on the continent. But I haven't heard anything more about this.

There are other initiatives such as airport master planning, expansion of financial settlement systems and the promotion of Sustainable Aviation Fuel (SAF) Production and this is where South Africa can play a role.

World Airnews carried an article about the research study headed by WWF that showed we have the immediate technical potential to produce 3.2 to 4.5 billion litres of SAF annually, following the strictest sustainability requirements.

This is enough to replace the use of conventional jet-fuel domestically up to a maximum blending threshold of 1.2 billion litres per annum, while also providing 2 to 3.3 billion litres for export. This initiative aims to engage with a wide range of industry and policy stakeholders on all SAF topics and facilitate cooperation and promote partnerships between them.



THE LARGEST AIRPORT ON THE CONTINENT



Dr Antonio Agostinho Neto International Airport is due to be complete by the end of the year

The Aviation Industry Corp of China is helping Angola - a southern African country - to build one of the largest airports on the continent due to be commissioned and working by the end of the year.

The Dr. Antonio Agostinho Neto International Airport in Luanda, the capital city will be located about 40 kilometres from the capital Luanada.

It is expected to support the existing international airport of Quatro de Fevereiro and handle the rising number of travellers to the country.

Chairman of the China National Aero-Technology International Engineering Corporation (a subsidiary of AVIC International Holding) Liu Hongguang, the main contractor, has said the airport will be the largest ever built by any Chinese enterprise outside China.

Upon completion, the airport cover 43 hectares and consist of two modern runways and large terminal buildings. It will be able to facilitate about 100,000 flights each year and an annual estimated 15 million passengers.

To tandem with the hub, the Angolan government has planned to construct nearby office buildings, hotels, conference and exhibition halls, as well logistics facilities.

According to Hongguang, the airport's infrastructure will be characterised by eco-friendly and energy-efficient technologies and equipment, and will have a wide range of smart devices, promising comfortable and convenient transit for passengers.

"We have introduced a lot of advanced Chinese engineering machines to build the airport and installed

top-tier Chinese civil aviation equipment and trained a great number of local employees.

He said the project had injected momentum into many local businesses and boosted employment and economic growth.

For instance, floor tiles in the terminal buildings originally designed to be high-quality and low-price China-made products, were changed to local sourced product when project managers learned about them.

The project has created more than 10,000 jobs for local residents, ranging from construction laborers to engineers and translators.

And the China National Aero-Technology International Engineering Corp has arranged weekly guided tours for teachers and students to the new airport to educate them about the construction and civil aviation project.

Meanwhile, earlier this month an MoU aimed at establishing an air link between Angola and Luxembourg was signed by the National Civil Aviation Authority of Angola (ANAC) and the Civil Aviation Directorate of the Grand Duchy of Luxembourg.

According to the president of ANAC's board of directors PCA Amelia Domingues Kuingua, the agreement provides for the possibility of up to seven weekly frequencies for passengers as well as an equal number of weekly flights for cargo.

The memorandum provides for airlines to operate a route table with third and fourth freedom traffic rights in the case of passengers and fifth freedom for load factors .

It comes at a great time for flag carrier TAAG Angola who are already serving Portugal and Spain and allows Luxair, the national carrier, to fly into and from Angola – making it the sixth carrier to fly into this southern African country after France, Spain, Germany , Portugal and Tunisia.

EXECUJET MRO SERVICES AFRICA CERTIFIED

The Aruba department of civil aviation and the Malawi department of civil aviation have certified ExecuJet MRO Services Africa to do line and heavy maintenance on select aircraft types on those countries' aircraft registry.

Aruba, in the Caribbean, where many business jets are registered, has granted approval that permits heavy and line maintenance on Dassault Falcon 7X and Falcon 900 aircraft as well as the Bombardier Challenger and Bombardier Global series aircraft. Aruba has also approved ExecuJet MRO Services Africa to overhaul Honeywell TPE331 turboprop and complete major periodic inspections (MPIs) on Honeywell TFE731 turbofan engines.

In a separate development, the Malawi department of civil aviation has certified ExecuJet MRO Services Africa to do line and heavy maintenance on Malawi-registered Embraer ERJ-135 and Embraer ERJ-145 commercial regional jets, as well as their derivatives, the Embraer Legacy 600 and 650 business jet.



Vince Goncalves, Regional Vice President Africa, ExecuJet MRO Services.

Regional vice president Africa at ExecuJet MRO Services Vince Goncalves said, "We are pleased to be recognised by so many international aviation bodies. This latest certification allows us to penetrate these two markets by providing world-class MRO services to local business jet operators and owners as well as those flying into different parts of Africa."

"Customers can expect their aircraft to be well-supported and maintained at all times thanks to our team of highly trained maintenance technicians and engineers who have extensive multi-OEM experience," he said.

ExecuJet MRO Services Africa is also certified by other civil aviation regulators such as: Angola, Botswana, Mozambique, Namibia, Nigeria, Zambia, Cayman Islands, Isle of Man and San Marino.



ROLLS-ROYCE & ETHIOPIAN AIRLINES

Rolls-Royce has signed a TotalCare service agreement with Ethiopian Airlines for Rolls-Royce Trent XWB-97 engines that will power four new Airbus A350-1000 aircraft.

The agreement will provide the airline with predictability as well as a known cost for the services and maintenance.

TotalCare is designed to provide operational certainty for customers by transferring time on wing and maintenance cost risk back to Rolls-Royce. This service is supported by data delivered through the advanced engine health monitoring system, that provides customers with increased operational availability, reliability and efficiency.

The Trent XWB is the most efficient large aero engine in service today and the Trent XWB-84 already powers 20 Ethiopian Airlines A350-900 aircraft in service.

The contract was signed during a visit by the airline to Rolls-Royce's Civil Aerospace headquarters in Derby, UK. Ethiopian Airlines is celebrating the 50th anniversary of its first flight to the UK in April 1973.

"We value the strong relationship we have built over the years with Rolls-Royce, and as we celebrate 50 years of flights to the UK, we continue to look forward to the implementation of this TotalCare agreement for the latest addition to our fleet with the introduction of the modern A350-1000 aircraft. We have experience of using the Rolls-Royce TotalCare service to ensure Trent 1000 and Trent XWB-84 engine availability and reliability and we are pleased to extend this service to the Trent XWB-97 model, which powers the A350-1000 aircraft," said Chief Executive Officer, Ethiopian Airlines Mesfin Tasew.

In addition to powering the A350-900 and A350-1000 aircraft, the Rolls-Royce Trent 1000 also powers ten Ethiopian Airlines Boeing 787 Dreamliner aircraft, all supported by TotalCare.

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FLYNAMIBIA LINKS WITH AIRLINK

FlyNamibia, a privately-owned domestic and regional airline, is joining Airlink to promote its flights and services to travel agents worldwide on the Global Distribution System (GDS).

Through the GDS, Airlink, an independent South African-based airline, has global reach and the ability to display and sell its inventory in many markets. Now FlyNamibia will enjoy the same global access on a franchisee basis.

Simultaneously, FlyNamibia will launch its new website - co-branded with Airlink- which will be directly linked into the Amadeus Altea reservation portal. This will make the booking process simpler and more user-friendly.

"Joining the GDS is a major milestone for our growing airline and it will be a boost for Namibia because it makes our flights, network and schedule visible to customers in parts of the world that, until now, we have been unable to access. It also lets us provide customers with a convenient, user-friendly and seamless booking platform," said FlyNamibia CEO Andre Compion.

"This is one of the logical progressions we envisaged when Airlink invested in FlyNamibia last September. It will help us strengthen air services within Namibia and support the Namibia Airports Company in positioning Windhoek's

Hosea Kutako International Airport as an alternative SADC region gateway hub. By building connectivity and extending FlyNamibia's reach, we will unlock new markets and efficiencies for Namibia's business, trade, travel and tourism sectors," said Airlink CEO and managing director, Rodger Foster.

Last September Airlink acquired a 40 percent stake in FlyNamibia in an investment that signaled its confidence and faith in Namibia and its bright economic prospects.

"Namibia's economic expansion is stimulating demand for travel to and from the country. FlyNamibia's access to the GDS exponentially enhances and increases our ability to tap into this and open new markets. Whilst we are moving closer and deepening our relationship with Airlink, FlyNamibia will continue to operate its own flights and retain its own unique brand and image. This dovetails neatly with Namibia's Harambee Prosperity Plan II and the National Transport Policy vision for efficient, world-class air transport services," said Compion.

Although FlyNamibia's inventory will be displayed on the GDS from July, all bookings for flights taking place up to and including 28th August, will be managed on FlyNamibia's current reservation system, www.flynamibia.com.na.

Reservations for FlyNamibia flights from 29 August onwards will be processed on the GDS with customers able to follow instructions on the website which will be linked to the new booking portal.

AIRVAN AFRICA



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4560 Hours Airframe TT. 690 Hours Engine SNEW
IO-390 (210HP) Engine and Scimitar Prop Upgrade.
MPI by SA Mooney in September 2022

Price: US\$ 85 000



*2003 GA8 Airvan

7800 Hours TT Airframe
Almost Timex.
Ex Botswana - No corrosion

Price: US\$ 245 000



*1964 Mooney M20C

3350 Hours TT Airframe, 1500 Hours SMOH
Recent interior, good paint.
The perfect budget A to B machine.

Price: R675 000



*2011 GA8 Airvan

7350 Hours Airframe TT. 1160 Hours Engine SMOH.
3-Blade Prop Upgrade. Cargo Pod.
Melvill and Moon Seat Covers.
Recently refurbished paint.

Price: R7 420 000



Lancair Evolution Turbine S/N 037

1250 Hours TT All Components
Extended range fuel tank

Price: US\$ 930 000



1962 Cessna 182E

6900 Hours TT Airframe
1100 Hours SMOH Engine

Price: Call For Price



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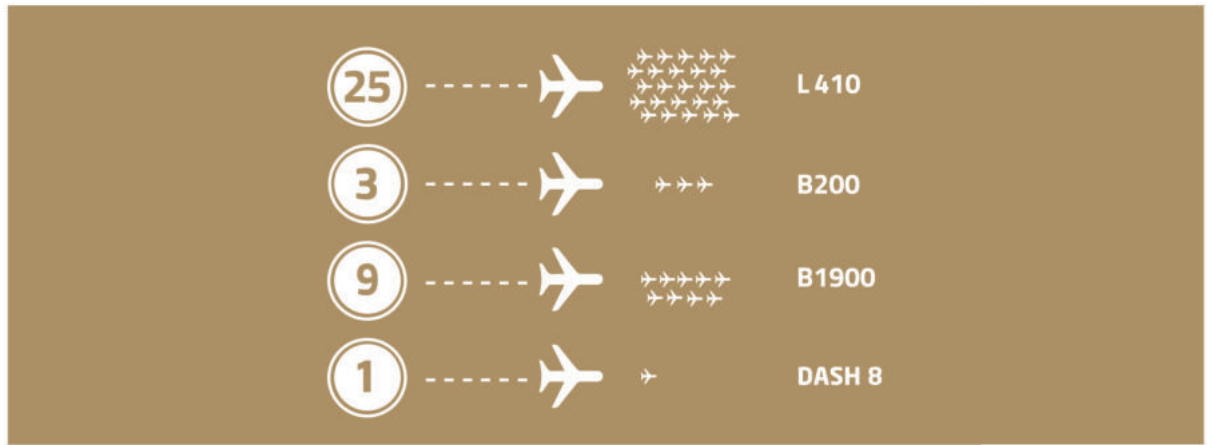
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- Aircraft Sales
- Aircraft Maintenance, Factory Service Centres
- Pilot & Engineer Training





SKYHORSE CHOOSES AIRBUS

Text and photo by Grant Duncan-Smith (Subiaco Photography)

A basic aviation risk standard or BARS registered aircraft operator, Skyhorse specialises in providing aircraft support and charter throughout Africa.

At present, their fleet consists of 10 new generation AS350 series or H125 helicopters, two Pilatus PC-6 fixed-wing aircraft and one Cessna F406 twin engine aircraft.

The company supplies aircraft to mining houses, drilling and construction projects, geophysical companies and agencies across Africa, Middle East and Australia. Their qualified team have flown over 35 000 hours with an excellent safety record.

They are a privately-owned company, prepared to adapt operations in a safe and efficient manner, to fulfil their clients' specific requirements. All maintenance is outsourced to NRG AMO 279, a South African maintenance organisation that solely maintains the Skyhorse Aviation fleet. Here is a shortened version of an interview with Ryan Louw, CEO and Chief Pilot.

GDS: So why does Skyhorse prefer the Airbus H125 to perform their missions?

RL: With the range of variants of the squirrel, the B2 suits magnetic surveys perfectly, the endurance and the relatively low fuel burn for that size platform, and reliability in the field makes it perfect for going into remote African flying magnetic survey or radiometric survey. The B3e, with its' external load capability, is perfect for the external load work that we do. In

particular the electromagnetic surveys that NRG is a world leader in. Being able to lift 500 kilogrammes in a helicopter with full tanks and in a dusty environment, is what we rely on. With the B3, there's not much I think that compares in terms of these capabilities in the hot and high environment.

The Airbus H125 is extremely reliable and very easy to maintain in the field. The service life limit on parts is a big factor that allows us to operate as long as we do. As the H125 series has been modernised since the 1970s, as various components have got modernised better, they've sort of filtered down the extended life limits on various components down to the earlier models. This is a big advantage when you replace a tail rotor at 3500 hours instead of 2500 hours.

Its' one of the advantages of sticking with the H125, that comes from the continuous modernisation of the airframe. I think it's a big plus for us.

GDS: Can you tell us about a real mission where the Airbus H125 was critical for the mission's success?

RL: One project that stands out for us is Eastern Greenland where we based our crew and an H125 configured for aerial geophysics on an exploration vessel. We carried out about 200 hours of survey flights. The Airbus H125 is so suitable for what we do because of its' reliability. The service scheduling is quite suitable for us at 150 hours between MPis.

When it comes to flying aerial geophysics, we think the Starflex is what makes a big difference for us.

Being able to fly as low as we need to and follow the terrain as accurately as we do, probably would not be possible with different types of rotor heads, and the Starflex makes a big difference for us.

DESPITE THE WEATHER

Photos by World Airnews correspondent Stuart Haigh.

Hundreds of thousands flocked to RAF Fairford, in Gloucestershire (UK) this weekend for the aviation spectacular that visitors have come to know and love.

This, despite wet weather that saw key displays cancelled and disruptions to the weekend schedule.

History was made when a Messerschmitt Me262 flew for the first time at an air show in the UK, finally taking off on 16 July after being grounded the day before.

Another highlight of RIAT 2023's flying display this year was the US Air Force B-52H Stratofortress bomber. The aircraft that took part was airframe 61-0029/BD belonging to the 307th Bomb Wing/93rd Bomb Squadron, an Air Reserve Component of the United States Air Force, stationed at Barksdale Air Force Base, Louisiana.

The most impressive part of the display came after landing, as the aircraft taxied down the runway using its peculiar steerable dual-bicycle landing gear to face the strong crosswinds.

The money made from the air shows will go to fund the RAF Charitable Trust's projects. On July 14 the Prince and Princess of Wales paid a surprise visit to the air tattoo, and met some of the children who took part in the charity's competition.



Thundering into the air was this Saab JAS-39C Gripen of the Swedish Air Force.



No UK airshow would be quite the same without the Royal Air Force Battle of Britain Memorial Flight Lancaster bomber.



The venerable Boeing B-52H Stratofortress climbs away into the sky with its eight engines leaving a trail of smoke in the sky.



Making a UK airshow debut was this Messerschmitt Me262 A/B-1c. The type was the world's first operational jet fighter aircraft and saw service during the latter part of World War II.





The order for 50 Jekta PHA-ZE 100 electrically powered amphibious aircraft will boost operations across India.

BOOST FOR FLYING BOATS

Jekta, a Swiss-based manufacturer of an amphibious aircraft the PHA-ZE 100, has signed an order for 50 of its electrically powered regional amphibious aircraft.

Indian seaplane operator Maritime Energy Heli Air Services Pvt Ltd or MEHAIR has inked a deal with deposits agreed for ten firm orders and options for 40 more.

With the agreement confirmed, MEHAIR will be the first customer to receive the aircraft in Asia, with initial deliveries starting in 2029.

It is anticipated that the first ten aircraft will be delivered in baseline configuration for 19 passengers to support regional connectivity.

Based in Mumbai, India, MEHAIR has been operating seaplanes since 2011 and has acquired the aircraft to update its fleet with a sustainable option.

“We know the Jekta team’s heritage for producing efficient amphibious aircraft and made a strategic decision to acquire these aircraft early. We want to be one of the first aviation companies in the world to operate a zero-emissions aircraft to support regional flights between land and water infrastructure,” said Siddharth Verma, MEHAIR director.

“Blessed with a 7,400 km long coastline and a rich diversity of rivers, lakes, backwaters and dams, India is readying for the amphibious aircraft revolution. We are one of the fastest-growing aviation sectors and the world’s largest untapped seaplane geography. The PHA-ZE 100 checks all the boxes for meeting this amphibious potential, and we are confident that the affordable airframe will transform the way India travels.”

MEHAIR already operates seaplane services supporting air travel between cities and destinations virtually inaccessible by land infrastructure. The company has served destinations across the Andaman and Nicobar Islands, as well as Maharashtra and is adding new routes under the government of India’s UDAN regional connectivity scheme, which aims to connect small towns in India through subsidised air routes and infrastructure development.

The Jekta PHA-ZE 100 attributes, which include low maintenance and fuel costs, much-reduced noise, no pollution impact, and minimal aviation infrastructure, combine to make the airframe an optimal platform for sustainable and new routes across the region.

“MEHAIR’s proposed operations and future vision exemplify the potential of our airframe to align with the needs of a growing population seeking to travel regionally, whether from water or land. We aim to drastically reduce per-passenger-per-hour flight costs compared with existing seaplanes, we are exploring the options for redefining single pilot operations in the commercial sector, and we are committed to attracting a new workforce into aviation, all of which will support Indian amphibious operations,” said George Alafinov, CEO Jekta Switzerland.

The PHA-ZE 100 amphibious flying boat will be certified to EASA CS-23 and US FAA FAR-23 standards for fixed-wing passenger aircraft. It is optimised to serve coastal and island communities, regional routes currently limited by operational costs, and to support new low-cost, sustainable services between cities without the need to install expensive land infrastructure. Flexible configurations, including 19-seat, mixed economy/freight, VIP, and ambulance options, make the most of the PHA-ZE 100’s spacious, stand-up cabin.

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DORNIER 228

FLIGHT TEST CAMPAIGN



ZeroAvia's initial prototype ZA600 flight testing campaign at Cotswold Airport in the UK has seen a 10th flight test to establish projections for future ranges using the system.

Over the course of the last six months, ZeroAvia has sequentially tested different areas of performance following the breakthrough, world-first flight of the system in January.

The campaign has seen the aircraft fly at 5,000 feet, perform an endurance test at 23 minutes, operate in the wide temperature range from just above freezing to almost 30C, and reach the maximum allowable speed under the Permit to Fly issued by the CAA.

Critically, throughout all phases of testing, the fuel cell power generation and electric propulsion system that are the core components of the novel zero-emission engine, performed at or above expectations. The hydrogen-electric engine has matched the power of the conventional, fossil fuel engine on the opposite wing, with the pilots able to fly with thrust generated only from the experimental clean propulsion system in certain tests.

"Plenty of people go through 40-year careers without marking their name in the history books of aerospace engineering. I'm so proud that so many of the team at ZeroAvia can say that they have done that already with this first phase of test flights. This Dornier 228 will now always have a place in our hearts, but we're excited to take it on its

next adventure and head further afield," said Gabriele Teofili, head of aircraft integration and testing ZeroAvia.

"Zero-emission flight technologies are moving from promise to delivery and our amazing team is leading the way with this testing programme. We do not have to push the unappealing choices on passengers of paying more or flying less to deliver climate conscious air travel. We instead can adopt this technology quickly to reduce climate impact and air pollution," said Val Miftakhov founder and CEO ZeroAvia.

"ZeroAvia is making fantastic progress in pioneering zero emission flight, and I want to congratulate them on another important step completed with their successful flight test campaign.

"I'm pleased that government support through the ATI Programme has helped ZeroAvia find innovative new ways to cut aviation emissions, which will help us deliver our Jet Zero Strategy and secure high-skilled green jobs in the UK," UK Minister for Industry and Economic Security Nusrat Ghani said.

ZeroAvia's Dornier 228 flight testing programme is part of the HyFlyer II Project, which is part funded by the UK government via the Aerospace Technology Institute, in conjunction with Innovate UK and the department for business and trade.

Hydrogen-electric engines use hydrogen in fuel cells to generate electricity, which is then used to power electric motors to turn the aircraft's propellers. The only emission is low temperature water, with studies finding above 90 per cent total climate effect reduction.



CESSNA ENHANCED

Textron Aviation has revealed significant enhancements to its iconic Cessna high-wing piston aircraft lineup - the Cessna Skyhawk, Cessna Skylane, Cessna Turbo Skylane and Cessna Turbo Stationair HD.

These include a range of high-tech standard features and sleek interior design options including modern and comfortable seating, updated instrument panels and exterior paint styles.

"For decades, pilots have chosen the Cessna piston lineup for its durability, comfort and performance," said Christi Tannahill, senior vice president, customer experience.

"When designing the next interior for the iconic aircraft family, it was important that we include feedback from customers and fans. The result is a more modern, sporty feel that aligns with our family of Cessna Citation jets for the best aviation experience."

Power headset jacks and charging ports at every seat (USB A and C device compatibility), upgraded seats with additional support and padding, and a centre armrest for the Cessna Skylane, Turbo Skylane, and Turbo Stationair HD models, are part of the new look.

The lineup offers exceptional style with top-notch performance - coming next year. From the sleek black instrument panel to the side panels, window locks and air vents, the aircraft is designed to make the flying experience even more exciting. Owners can select from a variety of modern standard paint schemes to customise their aircraft and make it their own.

With decades of impressive performance, powerful capability and low operating costs, the Cessna piston lineup is the perfect choice for aviators -whether they're taking their first solo flight or charting their next big adventure.

"Cessna pistons inspire the journey of flight," said Chris Crow, vice president, Textron Aviation Piston Sales.

"If you're a pilot, odds are that you learned how to fly in a Skyhawk. This investment demonstrates Textron Aviation's continued enthusiasm for our piston aircraft lineup, and we are thrilled to see these aircraft continue to support pilots worldwide in their training ambitions or mapping their next adventure."

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NASA'S X-59 FIRST TEST FLIGHT



According to statements and images shared by NASA, its experimental X-59 Quiet SuperSonic Technology (QueSST) plane could perform test flights later this year.

The National Aeronautics and Space Administration (NASA) has released a series of images showing NASA's X-59 as it sits on the flight line - the space between the hangar and the runway - at Lockheed Martin Skunk Works in Palmdale, California.

The move from its construction site to the flight line is one of many milestones that prepare the X-59 for its first and subsequent flights. Next up, the team will conduct significant ground tests to ensure the aircraft is safe to fly.

NASA now expects its demonstrator aircraft to make its first flight in 2023 following the completion of still-outstanding system evaluations.

The agency and partner Lockheed Martin has confirmed the 2023 first-flight target. The programme is already significantly delayed, with NASA previously having aimed to have X-59 get airborne in autumn 2021.

Meanwhile, NASA faces criticism about the X-59 programme, which the agency has described as developing technology that could herald the resumption of supersonic civilian air travel.

The X-59 aircraft is the cornerstone of NASA's Quest mission. It is designed to demonstrate the ability to fly supersonic, or faster than Mach 1, while reducing the loud sonic boom to a quiet sonic thump. NASA will then fly the X-59 over several communities to gather data on human responses to the sound generated during supersonic flight.

NASA will deliver that data set to US and international regulators to possibly enable commercial supersonic flight over land. The X-59's engine from General Electric, packs 22,000 pounds of propulsion energy and will power the X-59

as it flies at speeds up to Mach 1.4 and altitudes around 55,000 feet.

The advanced X-plane will reduce that sound to a quiet sonic "thump", which will be demonstrated in flights over communities around the US starting in 2024.



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PASSENGER TERMINAL FOR JKIA

The process of inviting investors to assist in the building of the new passenger terminal at Kenya's Jomo Kenyatta International Airport (JKIA) is due to begin in September.

This was announced earlier this year by Transport Cabinet Secretary Kipchumba Murkomen. It is estimated that the project will be complete by 2027.

The new terminal aims to address the inefficiencies and breakdowns caused by the airport's increased passenger traffic, which has grown from two million in 1978 to an average of eight million annually. The government envisions increasing the airport's capacity from 10 to 30 million passengers per year.

It is doubtful though, that this ambitious deadline can be met as 2027 is less than five years away.

In addition, the government is still negotiating a settlement with Chinese ACEG-CATIC JV to settle for the Greenfield Terminal project, which was cancelled. The announcement was made at the same time that Air France KLM's opened its new Africa headquarters in Nairobi.

"In the next couple of weeks, at most two months, we should have been able to put in public the expression of interest for investors to come and build a new terminal," said Murkomen.

"We want to move to 30 million a year...but it will be subject to the expression we are going to put forward an evaluation process and capacity for us to attract a good investment" he said.

Marius van der Ham, AirFrance KLM's regional manager for the East and Southern Africa, Ghana, and Nigeria region, said: "Our decision to open new offices here follows a restricting exercise we finished in 2021. It reveals our Eastern Africa markets, traditionally managed in Nairobi, showed many similarities in terms of the competitive landscape in the marketplace compared to markets in SA and Ghana."

The new office will provide customers with a wide range of services, even as the airline continues to adopt sustainable measures in its operations.

Zoran Jelkic, Senior VP of the AirFrance KLM Group, noted: "Plans for 2030, we want to reduce emissions by 30% CO₂, we want to be next zero in the next 20, 50 years."

The move is also part of the Airlines' strategic plan to bolster its network and enhance services in the region. The new region now consists of seven markets, including Kenya, Uganda, Tanzania, Rwanda, Djibouti, South Africa, Nigeria, and Ghana, with the addition of South Africa, Nigeria, and Ghana as new markets.

The offices are situated in Merchant Square on Riverside Drive in Nairobi and will be headed by Group's general manager Marius van der Ham.

In addition, it will enable Air France-KLM to better serve the growing demand for air travel in the region. The group currently operates flights to various destinations in East Africa, including Nairobi and Dar es Salaam.

"Africa is a region with abundant resources, talent, and potential, and we are excited to be part of its growth story. Therefore, we see this new office as a crucial step towards firming our footprint in this region and regard it as a key priority within our network," Ham said.

The airline has expanded in East Africa by increasing frequency in Tanzania. This is in addition to the already established network of KLM flights into Uganda and Rwanda.





NEW TERMINAL FOR MOROCCO AIRPORT

The National Airports Office (ONDA) of Morocco has announced plans to build a new terminal at Dakhla Airport. The announcement was made by Mohamed Abdeljalil, the country's Minister of Transport and Logistics.

The airport serves a city by the same name in western Sahara. And comes approximately four months after the inauguration of another terminal at the Dakhla airport. The new 424 m² business and private aviation terminal was officially opened on February 8th, 2023.

International operator Jetex Executive Aviation Morocco and Swissport Executive Aviation Morocco are established as the new Fixed Base operators at the new terminal.

With its modern architecture, the new terminal is designed to welcome VIP passengers in comfort and safety and a special zone for immigration formalities has been integrated into the FBO – constructed primarily in response to a growing demand for business and private aviation.

Dakhla Airport is an increasingly popular destination for tourists and foreign investors.

However, this latest project, currently undergoing technical studies, is only expected to start in 2024 and will take an estimated three years.

Since its inauguration in 2010, Dakhla Airport has been equipped with a terminal covering an area of 3,000 m², capable of accommodating up to 300,000 passengers annually.

In addition to an aircraft parking area designed to simultaneously accommodate four medium-sized aircraft, the airport has modern equipment ensuring passenger safety, security, and quality of service, explained the minister.

With 257,000 passengers recorded in 2019 and a steady air traffic growth rate of 18% between 2007 and 2019, Dakhla Airport could accommodate up to one million passengers by 2040.

This growth was highlighted in a recent report by the Directorate General of the National Airports Office, which announced an airport expansion project.

Estimated to cost Morocco Dirham 212 million or (US) \$220, Dakhla Airport is expected to increase its area from 3,000 m² to 10,000 m² by 2040.

AIR MALTA OLD AND NEW



Two Airbus A320neo belonging to Maltese national carrier Air Malta, sporting the "old" and the "new" livery while parked next to each other on Apron 9. 9H-NED is a 3-year old example that was delivered to KM in late November 2020, thus still sporting the "old" livery while 9H-NEF is a relatively new addition having been delivered earlier in the year. Photo credit Mario Caruana / MAViO News

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100 YEARS – ITALIAN AIR FORCE

Text and photos by Stuart Haigh

The Italian Air Force, or Aeronautica Militare Italiana, commemorated its 100th anniversary with a series of celebrations across Italy, including a major event in Rome.

The 'Air Force Experience' was hosted in the capital's central Piazza del Popolo earlier this year when visitors could commemorate the world of military aeronautics with stands, meetings, simulators and live music.

Since its formation, the Italian air force has been prominent in modern Italian military history and is best known for its acrobatic display team, the Frece Tricolori.



Frece Tricolori MB-339's display team. The Italian Air Force display team is known as the Frece Tricolori and they make use of the Aermacchi MB-339 is an Italian designed training/light attack aircraft.

The Aermacchi MB-326 was originally designed as a two-seat trainer and saw service with the South African Air Force in which it was known as the 'Impala'.



The Italian Air Force was founded on 28 March 1923 by King Vittorio Emanuele III as the Regia Aeronautica, or Royal Air Force.

The most recent event last month – involving the Air Force, Army and Navy as well as some privately owned aircraft that have had some connection or been operated by the Italians in the past - was held at the Pratica di Mare Air Force base near Rome.

It was a much larger parade involving some assets that took part for the first time and included an exception - an Italian-based US Air Force F-16 from Aviano that also made its appearance.

Other events included the reopening of the Historical Museum of the Air Force in Vigna di Valle, on the shores of Lake Bracciano, and an exhibition charting the history of the Aeronautica Militare that will travel to more than 20 cities across Italy in 2023.



The Canadair CT-133 'Silver Star' attended the airshow which tried to include as many types previously operated by the Italian Air Force. This Canadian-built version is now privately-owned and is on the French register as F-AYMD.



The North American F-86 Sabre was another type that previously saw service within the Italian Air Force. This example was put through its paces in front of the vast crowd and now wears US Air Force markings. Again, the aircraft is privately-owned and is on the French register.



To celebrate the 80th Anniversary of the 51 Stormo/103 Gruppo which isn't currently active, this A-11B (AMX) was adorned with special tail markings to commemorate the occasion.

ACSA BOOSTS CUSTOMER EXPERIENCE

The Airports Company South Africa (ACSA) is on a major push to enhance customer experience across its airport network through the use of technology, with the organisation announcing that a number of projects and initiatives are currently in the pipeline.

ACSA CIO Mthokozisi Mncwabe said that the need to digitalise the passenger experience, the airport environment and ACSA's operational processes has been identified as a core strategic focus for the business.

As such, ACSA's vision around technology supports its organisational strategy and is based on the following pillars: building digital infrastructure, improving the passenger and customer experience, digital innovation and how it will enrich the front-end customer experience, and cybersecurity.

"We are currently busy with a number of initiatives that will harness the power of artificial intelligence and robotics to drive self-service functionality through the various touchpoints at ACSA's airports," Mncwabe said.

"For example, we are looking to introduce robotics to enhance the customer experience in line with a global trend that is seeing increased use of this technology for the delivery of retail and food and beverage services at airports."

Similarly, ACSA is also looking to introduce a biometrics-driven border control system in a project that is being completed jointly with the Department of Home Affairs.

The project will focus on security processing systems that use facial recognition capabilities or biometric information embedded in a bar code in each passenger's passport.

PERSONALISED CUSTOMER EXPERIENCE

Mncwabe said that one of the flagship projects that ACSA is working on is a R150 million initiative with Microsoft to

create a personalised customer experience, by leveraging technology to get to know its customers.

"We are looking to create a platform that will integrate all the various customer services that currently operate in siloes. We want to use this platform to bring them altogether into one user interface," said Mncwabe.

"The idea is that multiple services, such as booking a flight, a car or a hotel will be aggregated and accessed through a single platform and user interface."

According to him, the project is dependent on the introduction of AI technology that will facilitate and assist with data analysis and personalisation, which is in line with the motto "know you better, serve you better".

"At the moment, we are engaging with a number of service providers to ultimately empower the customer by delivering a platform that is user friendly and easy to understand. We will also continue to strengthen digital integration across all of our operations in order to improve efficiency and enhance the experience of our airports for all stakeholders, especially passengers," said Mncwabe.

CYBERSECURITY PLAYS INTEGRAL ROLE

He said that cybersecurity plays an integral part in ACSA's technology drive, with the company having adopted a zero trust architecture approach, leveraging existing investments and adopting a cyber security mesh architecture.

"Unfortunately, cybersecurity is always a game of catch-up as hackers are dedicated and committed to constantly finding and exploiting new vulnerabilities.

The cyber threat landscape continues to evolve in sophistication and frequency of attack, so it is impossible to always defend against malicious activity," said Mncwabe.

"However, in the very least, organisations must ensure that their security systems are robust and up to date in terms of the latest security patches. It is important to note that ACSA has significantly improved its cyber and information security maturity by focusing on people, processes and technology."

He said that the key objectives of ACSA's strategy are to adopt and leverage appropriate technology in order to enhance the customer experience and operational efficiency while simultaneously protecting its systems and information.

"Our IT capabilities are intended to support our value creation process through the delivery of a consistently positive customer experience, paperless travel, automated cost management, greater efficiency, revenue diversification and, ultimately, business growth," he said.





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REGIONAL WOES AT KSIA

By World Airnews correspondent Clinton Barnard

Durban's King Shaka International Airport (KSIA) is currently served by two regional Foreign-Based Scheduled Passenger Operators, (FBSPOs) * both of which started operations to Durban, South Africa earlier this year.

It has not been plain sailing for both who have since met with significant challenges.

Eswatini Air has appeared to have had issues regarding its flight scheduling with arrival days changing almost weekly and numerous cancellations. At its peak, these happened three in twice as many days in early June.

By July, the schedule stabilised with three arrivals on Mondays, Wednesdays and Saturdays but with different arrival and departure times for each day.

For example; Mondays arrivals are 15H40 (16H20 departure), Wednesdays 11H15 (12H05) and Saturdays 08H00 (09H00). This is the first operator ever to have three different arrival slots on three successive arrivals dates in this airport's history.

Eswatini Air advertised a seven-arrival weekly frequency for Durban prior to its start of flight operations earlier in the year. It would now appear that this schedule was overly optimistic.

In June the use of Eswatini Air's two Embraer ERJ-145 EPs was substituted on the Durban route by a single Royal Zambia Airlines ERJ-145 LR (long range) registered 9J-TST for a total of 14 consecutive actual arrivals.

The reason for this substitution remains unknown to this writer. Starting July 1, the EPs resumed their Durban operations.

Proflight Zambia has not escaped its own woes this year, which it described as "the most challenging time since Covid"

This happened when one of its three 50-seat CRJs apparently suffered an "unscheduled maintenance event" which will see the aircraft out of action for an uncomfortably long time.

This has negatively impacted the planned flight schedule and caused cancellations, not only on the Durban route, but others as well.

Some highlights include that Proflight Zambia recently signed a lease with Africa Charter Airlines for Boeing 737-5Y0 registered ZS-TGY sporting full Proflight markings.

The 126-passenger aircraft, with six abreast seating, was acquired in May and commenced operations on June 1. It will significantly increase capacity on certain routes.

ZS-TGY is not an unfamiliar quantity for Proflight as this same aircraft was used by the company to undertake four flights between KSIA and Zambia during 2019 when greater capacity was required than that available by the only CRJ100ER.

The type is not expected to be used on Proflight's Durban route regularly.

Furthermore, a fourth CRJ (exact model unknown at the time of writing) is to be added to the fleet before September this year, according to the carrier's spokesperson. It is presumed that they will be leased.

The significance of this reinforces the view that smaller aircraft (usually operated by regional carriers) sometimes do not provide the resilience larger aircraft fleets provide.

**This is a term coined by the author and not an internationally accepted aviation term. The term is used to describe airline operators that are not based in South Africa, who fly into Durban and refers to scheduled passenger flights – excluding charter and cargo.*

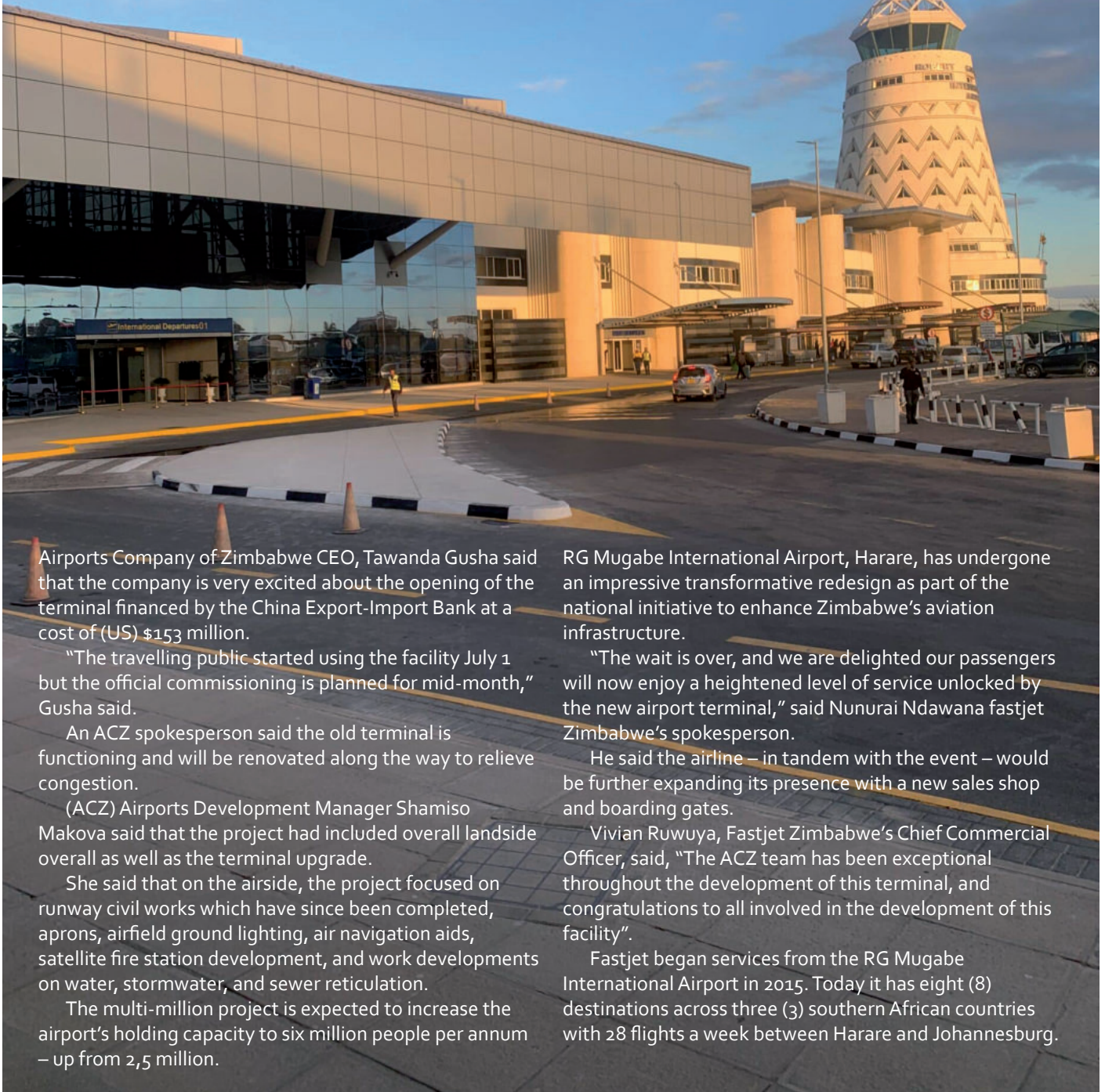
ZIM AIRPORT NEW TERMINAL

By World Airnews correspondent Wallace Mawire

The Robert Gabriel Mugabe International airport's new terminal in Zimbabwe opened doors marking the end of a long-awaited infrastructure upgrade project supported by the Chinese government.

Thousands of citizens turned up to witness the occasion that was commissioned by Zimbabwe President Emmerson Mnangagwa. The presidential delegation toured the departure terminal, check-in, immigration customs and security, the CCTV room, departure lounge, aerobridges, ramp, and arrivals. The public event was conducted at the Airport Village Stadium.

Meanwhile, regional aircraft operator Fastjet Zimbabwe congratulated both the ACZ, the Ministry of Transport And Infrastructural Development, and the Government of Zimbabwe on the new terminal facilities.



Airports Company of Zimbabwe CEO, Tawanda Gusha said that the company is very excited about the opening of the terminal financed by the China Export-Import Bank at a cost of (US) \$153 million.

"The travelling public started using the facility July 1 but the official commissioning is planned for mid-month," Gusha said.

An ACZ spokesperson said the old terminal is functioning and will be renovated along the way to relieve congestion.

(ACZ) Airports Development Manager Shamiso Makova said that the project had included overall landside overall as well as the terminal upgrade.

She said that on the airside, the project focused on runway civil works which have since been completed, aprons, airfield ground lighting, air navigation aids, satellite fire station development, and work developments on water, stormwater, and sewer reticulation.

The multi-million project is expected to increase the airport's holding capacity to six million people per annum – up from 2,5 million.

RG Mugabe International Airport, Harare, has undergone an impressive transformative redesign as part of the national initiative to enhance Zimbabwe's aviation infrastructure.

"The wait is over, and we are delighted our passengers will now enjoy a heightened level of service unlocked by the new airport terminal," said Nunurai Ndawana fastjet Zimbabwe's spokesperson.

He said the airline – in tandem with the event – would be further expanding its presence with a new sales shop and boarding gates.

Vivian Ruwuya, Fastjet Zimbabwe's Chief Commercial Officer, said, "The ACZ team has been exceptional throughout the development of this terminal, and congratulations to all involved in the development of this facility".

Fastjet began services from the RG Mugabe International Airport in 2015. Today it has eight (8) destinations across three (3) southern African countries with 28 flights a week between Harare and Johannesburg.



ACQUISITION

A UK-based supplier of aircraft cleaning and detailing services to commercial airline and private aviation clients - Up & Away Aviation, - has secured new ownership with a US company called Unifi Aviation.

Unifi Aviation is the USA's largest ground aviation services company and part of the Argenbright Group.

The deal was signed by Up & Away founder and CEO Stefan Murphy and Unifi CEO Gautam Thakkar at the UK company's London Oxford Airport headquarters.

The agreement was formalised as Up & Away opened its 13th base at London's Gatwick Airport after having ramped up its personnel to 500-plus employees.

Over 400 of them are dedicated to Up & Away Aviation Services' airline activity.

While Unifi Aviation, headquartered in Atlanta, GA in the USA is present at more than 200 airports, offering a range of ground services from ticketing, ground handling, cabin cleaning and cargo.

While the Up & Away brand will remain, Stefan Murphy will become Unifi's managing director in the UK.

Ernie Patterson, chairman of International Business for Argenbright Group, will provide additional oversight of Unifi's UK aviation business, working with Up & Away's team to broaden operations into more airports, including London Heathrow.

Dialogue between the two companies first began six months ago.

Up & Away provides various aviation services, including cabin-cleaning, de-icing, executive jet detailing, technical cleaning, and other adjacent aviation services. The business, originally focused on executive jet clientele, and then later expanded into airlines in 2019 when a leading CEO and business jet owner asked the company to pitch for its airline cleaning business.

"We look forward to working with Stefan and his team as they join the Unifi family and we build upon Up & Away's track record," said Gautam Thakkar, CEO Unifi.

Celebrating a UK/US partnership, at London Oxford Airport are (from right to left) Gautam Thakkar, CEO Unifi, Ernie Patterson, Chairman International Business, Argenbright Group and Stefan Murphy, Up & Away Aviation.

WORLD₂FLY



World2Fly has continued to expand its fleet. Recently Corendon Dutch Airlines signed a lease agreement to induct a widebody from the Spanish operator to fly TATL routes to the Caribbean. The company has three Airbus A350 in its fleet. This A330 was a welcome visitor at Safi Aviation Park where it was being prepared to join the World2Fly fleet as it continues to see huge interest in its ACMI offerings. Photo credit - Mario Caruana / MAViO News.



The Commercial Aviation Association of Southern Africa NPC (CAASA) is a non-profit organization formed in 1944 to promote and protect the commercial interest of the general aviation industry in South African aviation.

Our member companies include airport operators, non-scheduled operators, business aircraft operators, flying training organisations, aircraft maintenance companies and companies offering a whole range of supporting and retail services.

If you are a company trading or operating in general aviation, then you should be a member of CAASA.



Pic: Pilatus Aircraft Corp.



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NEXTGEN AIRBUS WINGS

Airbus is to further investigate its UK innovation capabilities, after the opening of a new Wing Technology Development Centre at its Filton site in the UK recently.

The facility, which will be used to build and test demonstrators for a range of programmes and research projects, was opened by Nusrat Ghani, UK minister of state at the department for business and trade.

The new facility will help Airbus accelerate the design, build and testing of wings for next-generation aircraft, by using the latest technology and world-leading demonstrators to further improve the performance of its wings.

Alongside engine optimisation, making wings longer, leaner and lighter is one of the biggest opportunities to improve fuel efficiency, reduce CO₂ and ultimately work towards the aviation industry's ambition to achieve net zero carbon emissions by 2050.

Airbus Head of Filton site and Wing of Tomorrow programme Sue Partridge said,

"The new Wing Technology Development Centre will help us to ground our research in practicality. A key element of how we deliver technology for next-generation aircraft wings is through Wing of Tomorrow (WoT), our largest research and

technology programme led by the team in the UK.

"Last week, we achieved a critical milestone in the programme when our second wing demonstrator was completed by the team in Broughton, Wales and delivered to the WTDC. Here it will be prepared for structural testing in our Aerospace Integrated Research and Technology Centre (AIRTeC)."

The WoT programme allows Airbus to explore new manufacturing and assembly technologies so future generations can continue to benefit from flying.

"It's about preparing our people, technology, industrial system, supply chain and digital and physical capabilities for next-generation aircraft. We're leveraging industry partners and the very best digital tools and automation to identify potential technology bottlenecks that may slow us down in the future. The foundations we lay now will help us build better and faster when the time comes."

The WTDC adds to Airbus' existing research and technology footprint in the UK, including the Advanced Manufacturing Research Centre (AMRC) in Broughton and both the ZEROe Development Centre and Aerospace Integrated Research & Test Centre (AIRTeC) at its Filton site.

Since 2014, Airbus has been awarded (pounds) £117 million by the Aerospace Technology Institute for Wing of Tomorrow-related research.



Airbus' folding wingtip technology looks at increasing the span of the wing to increase lift, reduce drag and to improve fuel efficiency without the need to alter existing airport infrastructure.



Boeing continuing modernisation efforts on CH-47 platform with advanced Block II Chinook

CH-47 CHINOOK PRODUCTION FOR SOUTH KOREA

As part of a US department of defence foreign military sale, Boeing has received a contract to produce 18 CH-47F Block I Chinooks for South Korea and one additional aircraft for Spain.

As Boeing continues transitioning to building the advanced Block II configuration, the deal valued at up to (US) \$793 million represents the final aircraft to be ordered on the current CH-47F Block I FMS contract with the US government.

"The CH-47F Block I Chinook continues to be the preeminent heavy-lift helicopter in the world for good reason," said Heather McBryan, H-47 vice president and programme manager, Boeing Vertical Lift.

"While this concludes Block I orders as we continue our modernisation efforts, we'll continue supporting our customers' aircraft as they play a vital role for years to come."

Although production and deliveries of the CH-47F Block I will conclude with this order in 2027, Chinook modernisation efforts will continue with the already underway H-47 Block II programme.

Block II provides increased lift and range thanks to an improved drivetrain, a reinforced airframe and redesigned fuel

tanks. Currently, six Block II aircraft are under contract with the US Army, 36 with US Army Special Operations Command (SOCOM) and 14 with the United Kingdom. SOCOM have been receiving Block II aircraft for several years and the US Army will receive its first CH-47F Block II in early 2024.

"The Block II programme is the natural successor to an already exceptional aircraft," McBryan added. "It will provide the US Army and international allies even more capabilities in a complex and evolving battlefield."

Block I and Block II aircraft will coexist in the heavy-lift space. With this latest acquisition of Chinook Block I aircraft, Spain will increase its fleet to 18 aircraft and South Korea will join 15 other operators who benefit from the digital cockpit and advanced cargo handling ability.

"South Korea adds to a growing list of operators around the globe that recognise the value the modernised CH-47F Chinook brings to the table," said Vince Logsdon, vice president, global business development and strategic marketing for Boeing Defense, Space & Security.

"While Spain is already reaping the benefits of the aircraft in Europe, we are honoured to support South Korea's heavy-lift helicopter modernisation with a versatile product capable of meeting the demanding mission requirements in Asia Pacific."

SUPPORT FOR AERIAL FIREFIGHTING

Coulson Aviation is the only private helicopter operator - for the fifth consecutive year – that will support Southern California’s Quick Reaction Force (QRF) – around-the-clock operation that will fight wildfires at the first sign.

Contracting with Los Angeles, Orange, and Ventura County fire departments with its fleet of very large helitankers, pilots, and support crews, this contract extends Coulson’s support of the QRF to 24/7/365, a first-ever opportunity for the company and the counties and the only contract of its kind worldwide.

“Coulson Aviation is pleased to be part of this game-changing and successful force for California in response to the state’s year-round needs,” said Wayne Coulson, CEO of Coulson Aviation.

“Our aircraft are on contract in the LA Basin, day and night, providing additional air support to the brave men and women firefighters protecting Southern California.” This year the contract upgrades from two to three Boeing CH-47 Chinook very large helitankers, a Sikorsky S-76

step in fighting what has become a year-round season of potentially deadly and destructive wildfires in Southern California and beyond.”

Coulson’s CH-47 Chinook very large helitankers are equipped with Coulson’s own RADS-L delivery system, the largest fixed helicopter tank in the world at 3,000 gallons and can “hover fill” in 90 seconds. Coulson also designed and manufactured the largest retractable snorkel, allowing for the quickest return to the fire line.

The aircraft operate at night with pilots using night vision goggles (NVG) and receive additional “eye-in-the-sky” support from the Sikorsky S-76 intelligence and recon helicopter. During last year’s contract, Coulson dropped more than 700,000 gallons of water on more than 25 wildfires with over half that under the cover of darkness.

While contracted to the county fire departments, the aircraft will also be available to support partner fire departments within SCE’s 50,000-square-mile service area. Earlier Coulson participated in a demonstration of the QRF’s operations with a water drop at the Santa Fe Dam in Irwindale, Calif.

The company is a global leader in aerial support operations.

intelligence and recon helicopter, along with all the flight and maintenance crews.

“Our goal to keep all new wildfires to 10 acres or less 95% of the time is not possible without the most state-of-the-art fleet of firefighting aircraft in the world,” Orange County Fire Authority Chief Brian Fennessy said of Coulson’s helicopters.

“That is exactly what the QRF is, and its year-round availability is a significant



Coulson Aviation CH-47s QRF demonstration in Irwindale, California.

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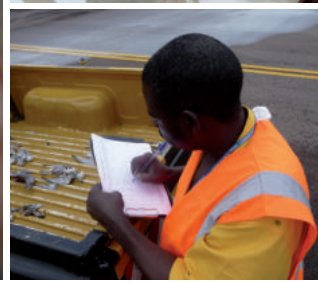


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DELTA AIRLINES ADDITIONAL ORDER

Delta Air Lines has disclosed an order for 12 additional A220-300 aircraft, bringing the airline's total firm order for A220s to 131 aircraft - 45 A220-100s and 86 A220-300.

Throughout the years, Delta has re-ordered the A220 five times and is today the largest A220 customer and operator in the world.

"The A220-300 offers efficient performance and flexibility," said Kristen Bojko, vice president of fleet. "The continuing expansion of Delta's A220 family is an integral investment in the future of sustainable aviation."

"This additional order from the largest A220 customer and operator is yet another strong endorsement for the value and opportunities offered by this latest generation aircraft family. The A220 provides Delta the flexibility to right-size its operations, gaining in efficiency and offering superior single-aisle comfort. In service with Delta, the A220 has proven to be a game changer in its size category in highly competitive North America markets," said Christian Scherer, Airbus chief commercial officer and head of international.

In addition to its positive cabin experience, the aircraft plays an important role in helping decrease airline operating costs and environmental impact. Offering 25% lower fuel burn and CO² emissions per seat compared to previous generation aircraft, the A220 is the

only aircraft purpose-built for the 100-150 seat market. Combining state-of-the-art aerodynamics, advanced materials and Pratt & Whitney's latest-generation GTF engines, the A220 brings customers a 50% reduced noise footprint and around 50% lower NOx emissions than industry standards.

Delta took delivery of its first Airbus A220 in October 2018, and was the first US carrier to operate the aircraft type. Delta currently operates a fleet of 433 Airbus aircraft, including 61 A220 aircraft, 280 A320 Family aircraft, 64 A330s and 28 A350-900 aircraft.

With 271 A220s delivered – as of the end of June - to 16 airlines operating on four continents, the A220 is the optimal aircraft to offer operational flexibility for both regional as well as long-distance routes.

To date, more than 90 million passengers have flown on the A220.

The fleet is currently flying on over 1,100 routes and over 375 destinations worldwide. As of the end of June 2023, around 30 customers have ordered more than 800 A220 aircraft - confirming its leading position in the small single-aisle market.





SUPPORT FOR SRI LANKA AVIATION INDUSTRY

The International Air Transport Association (IATA) urged Sri Lanka to develop an aviation blueprint so as to generate greater economic growth and prosperity through having a stronger aviation industry.

"Aviation connectivity can play a much bigger role in Sri Lanka's economic development and social advancement. But this will not happen by chance. Government support will be critical to growing a strong airline sector and developing Colombo as an aviation hub. We urge the government and all industry stakeholders to collaborate on developing an aviation blueprint to strengthen the aviation industry's competitiveness and bring greater prosperity to Sri Lanka.

And IATA stands ready to support through our expertise and sharing of industry best practices," said Philip Goh, IATA's Regional Vice President for Asia Pacific.

Aviation has a role to play in 15 of the 17 UN Sustainable Development Goals. Trade and tourism rely on aviation, and this helps to create jobs, alleviate poverty and generate prosperity. In a 2018 IATA study, Sri Lanka's aviation sector supported some 700,000 jobs and contributed \$8 billion to the GDP. This has the potential to increase to over 1 million jobs contributing nearly \$30 billion to the GDP by 2038.

In his keynote remarks at Aviation Day Sri Lanka, organized by IATA and the Civil Aviation Authority of Sri Lanka (CAASL), Goh suggested three areas to consider in the aviation blueprint: facilitating sustainable growth, safety, and sustainability.

Facilitating Sustainable Growth: "Sri Lanka's aviation blueprint needs to facilitate the sustainable growth of the industry and having an updated airport masterplan is the first step. I urge the government to engage in a consultative

approach involving airlines to ensure that industry input is factored in," said Goh,

Goh urged Sri Lanka to digitize processes for passenger and cargo facilitation. "Many of the country's passenger and cargo processes continue to be paper based. As traffic grows, digitization will be key to address capacity constraints, increase efficiency and improve the travel experience. IATA's One ID and One Record initiatives can help support this," said Goh.

Goh also highlighted the need to keep costs low, in particular jet fuel. Airlines pay more for jet fuel in Sri Lanka than at other major airports in Asia. He recognized much has been done in recent months to lower the cost of jet fuel, and encouraged the government to review and consider placing limits or capping the amount that CEYPETCO can mark up for supplying fuel at the airport.

Safety: "It is important for Sri Lanka's aviation sector to grow sustainably in a safe manner, and IATA is doing our part to support the country's efforts. Utilizing the International Airlines Training Fund, IATA will support the aviation industry in Sri Lanka by conducting safety related training in August for CAASL and Sri Lankan Airlines," said Goh.

Goh encouraged the government to explore how the IATA Operational Safety Audit (IOSA) and IATA Safety Audit for Ground Operations (ISAGO) can be used to contribute to greater aviation safety in Sri Lanka.

Sustainability: "I am delighted that net zero carbon from aviation by 2050 is one of the stated policy goals of Sri Lanka's sustainable aviation environment policy, including the need to ensure the availability of sustainable aviation fuels (SAF) in the country," said Goh. SAF is expected to abate more than 60% of aviation carbon emissions by 2050.

Goh called on the government to adopt a comprehensive consultation process involving airlines and other aviation stakeholders as the government develops sustainability policies.

NEXT STAGE 'EXCALIBUR' AIRCRAFT PROJECT

Leonardo has won a UK Ministry of Defence contract worth around £115 million or (US) \$150 million that will launch the next stage of the Excalibur Flight Test Aircraft (FTA) project.

The project supports the introduction of a new fighter aircraft that will form the basis of the UK's Future Combat Air System (FCAS) that is ear-marked to be delivered by 2035 by the Global Combat Air Programme – an international collaboration between the UK, Italy and Japan.

The Excalibur project is a key part of FCAS and will involve the development of an aircraft dubbed a 'flying electronics laboratory' that will be adapted to host integrated sensors, digital technology and integrated communications.

This aircraft is expected to fly with the new technology within the next three years, when on-board scientists and engineers will test the sensors and communications systems whilst in flight.

Central to the development of the fighter aircraft is a Boeing 757 jet aircraft that will be completely overhauled. That aircraft was bought from charter flight company Titan Airways, and is already at 2Excel's facility in Lasham, Hampshire, ready for engineering.

As a founding member of the UK's Tempest combat air partnership, Leonardo will primarily use the airliner to test new technologies being developed by the trilateral programme.

The aircraft - designed in Yorkshire – will be built in Hampshire using the concepts conceived by Leonardo in Bedfordshire and 2Excel in Northamptonshire.

The Excalibur project is just one that the UK Tempest Partners, BAE Systems, Leonardo UK, Rolls Royce & MBDA and the UK Ministry of Defence, are continuing to collaborate on to enable the successful delivery of GCAP in the required programme timelines.

Phase one of the Excalibur project saw 2Excel conduct an engineering study into the 757 airframe to understand its construction in-depth, which entailed experts from UK industry taking the retired aircraft apart piece-by-piece.

This was required so that the UK team would be able to provide the appropriate regulatory evidence and design information to the Civil Aviation Authority (CAA) and enable the second, modified aircraft to be certified for flight.

Having completed this phase of the project, the team has generated the knowledge required to undertake the modification of a second aircraft.

The new contract will cover the physical modification of the 757, as well as flight tests, certification and the work required to secure approval from the CAA.

The Excalibur aircraft will be adapted to host integrated sensors, non-kinetic effects (ISANKE) and integrated communications systems (ICS) that Leonardo and its international partners are developing as part of GCAP.

"The Excalibur programme will help us to accelerate the development of advanced electronics for the ISANKE & ICS domain via early flight testing, which can take place in parallel with the wider development of the core platform. This will inject additional pace into the programme and support our ambitious goal to deliver a next generation combat aircraft by 2035," Andrew Howard, director



The 757 aircraft which will be modified into Excalibur (tail number G-POWH 3 – now G-FTA) lands at 2Excel facility in Lasham, Hampshire, in the UK.



C780 PROPELLER FOR BEECHCRAFT

McCauley Propeller Systems has announced that its newest C780 propeller for the Beechcraft King Air B300 series, featuring four aluminum swept blades and a 105-inch diameter, has achieved certification from the Federal Aviation Administration (FAA).

from the Federal Aviation Administration (FAA). McCauley Propeller Systems is a division of Textron Aviation Incorporation.

The new high-performance propeller offers King Air B300 operators additional payload, increased takeoff and climb performance, reduced noise in the cabin and cockpit, and greater time between overhauls.

"The McCauley C780 is a new, lightweight, scimitar blade design propeller that enhances the already legendary King

Air flying experience," said Heidi McNary, vice president and general manager, of McCauley Propeller Systems.

"We're proud to continue to offer customers the quality and craftsmanship that aviators have come to expect from McCauley over the past 85 years."

With the new C780 propeller, King Air B300 owners and operators will experience:

- Propeller weight savings of more than 50 pounds
- Increased takeoff and climb performance
- Reduced noise in the cabin and cockpit
- Extended Time Between Overhaul (TBO) of 5,000 hours or 72 months
- Textron Aviation's 4,000 hours or 36-month limited propeller warranty

King Air B300 customers can have the propeller installed on their aircraft at a Textron Aviation service centre or Authorised McCauley service facility.

SASOL TO PRODUCE GREEN AVIATION FUEL

In a bid to accelerate the development of sustainable aviation fuels, South African fuel and chemicals giant Sasol has signed a landmark agreement to establish a joint venture with Topsoe, a global leader in carbon emission reduction technologies.

The purpose of the Sasol Topsoe 50/50 JV is to develop, build, own, and operate sustainable aviation fuel plants, and market sustainable aviation fuels derived primarily from non-fossil feedstock, utilising green hydrogen, sustainable sources of CO₂ and biomass with a specific focus on Sasol's Fischer-Tropsch and Topsoe's related technologies.

Here is a shortened version of an interview that first appeared on the www.news24.com website.



Q: Why do you describe this as a “landmark” agreement?

A: The joint venture will focus on sustainable aviation fuel (SAF) and the foundation it's built on will be on proven technologies that both Sasol and Topsoe bring to the table.

Now, we know that the combination of Fischer-Tropsch with sustainable sources of carbon, as well as green hydrogen would be one way to produce sustainable aviation fuel.

And Topsoe will also bring another two or three feedstock technology routes, one of which involved the reuse of cooking oils, tallow fats, plant oils, and that type of feedstock to produce SAF.

To give you context, today the sustainable aviation fuel market is around 300 million tonnes plus and the fuel [available] is around 200 000 to 250 000 tonnes plus. So a fraction is currently in play, but 70% of that fuel [uses] Topsoe's technology.

If we combine that with our Fischer-Tropsch, and our developments and enhancements that we've made over the last years. We probably have the broadest play of technologies and feedstock routes to produce sustainable aviation fuel. That is why it's such a big deal.

Q: The world's largest aerospace company, Boeing, has recently introduced a Sustainable Aviation Fuel Dashboard to track the anticipated sustainable aviation fuel production over the next 10 years. Obviously, then, you two are not the only ones pursuing SAF. Is there a race of some kind afoot?

A: When you look at who is endeavouring to play in the sustainable aviation fuel market, you must differentiate the startups from the proven outfits that have trialled and tested their technologies.

Whereas the others mostly are talking about their technology - they haven't built it, they haven't proven it, they haven't marketed they haven't tested it - Sasol, in 2010, already commercialised and tested our fully synthetic jet fuel produced out of Synfuels at the time.

Q: If sustainable aviation fuels are to be produced from green hydrogen, shouldn't the focus first be on seeing green hydrogen flow?

A: The joint venture has technology routes that are ready now; plant oils and reused cooking oils are available today. So, the joint venture would probably focus on that first; then it will look to develop the e-fuels part, which could be developed from biomass as well as CO₂ that is captured or comes from biogenic sources of CO₂ and green hydrogen.

For example, in Scandinavia or Canada, there is a lot of hydropower and a lot of cheap electricity. That is ready to go now, so hydrogen produced from those types of sources will be available in the next five years. And those are the opportunities that we need to look at to harness where the source of carbon, as well as the cost of hydrogen, can be very competitive. That would be the remit of the joint venture - to go and find those opportunities.



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