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WORLD AIR NEWS

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A TWIN TURBOPROP

Luxwing - a Maltese operator – will be adding a second DHC-8-402 to its fleet and it will be aptly registered 9H-LWB. The twin turboprop was originally delivered to a US regional carrier Colgan Air in October 2010. The airframe then moved to Republic before eventually being leased to FlyBe in November 2015, until the latter went belly up. The DHC-8-400 was noted in storage at Saarbrucken together with ex-FlyBe airframes since the British feeder carrier folded. Recently the aircraft was noted landing in Malta to undergo maintenance at Medavia. Photo credit Mario Caruana / MAviO News.

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A LOOK ON THE BRIGHT SIDE

By Heidi Gibson

African airlines – accounting for just over 2% of the air passenger market - posted a 28.1% traffic increase in September 2023 versus a year ago and capacity was up 29.9% - while the load factor slipped 1.0 percentage points to 72.6%.

The load factor is a metric used in the airline industry to measure the percentage of available seats that have been filled by passengers.

The higher the load factor the more the airline has sold and filled its seats – and is definitely better than a low load factor. Africa is down.

But, on a brighter note, the Asia-Pacific airlines and the region has really rebounded, with a 92.6% increase also measured in September 2023 traffic compared to September 2022.

These are the most recent figures released by the International Air Transport Association (IATA) and so predictions are - 2024 will be the first-time passenger traffic will exceed pre Covid-19 levels or go above those measured in 2019.

And the bottom line is?

"As 2023 fast approaches, we can look back on a year of strong recovery in demand as passengers took full advantage of their freedom to travel. There is every reason to believe that this momentum can be maintained in the New Year, despite economic and political uncertainties in parts of the world. But we need the whole value chain to be ready.

"Supply chain issues in the aircraft manufacturing sector are unacceptable. They have held back the recovery and solutions must be found. The same holds true for infrastructure providers, particularly air navigation service providers. Equipment failures, staffing shortages and labor unrest made it impossible to deliver the flying experience our customers expect. A successful 2024 needs the whole value chain to be fully prepared to handle the demand that is coming," said Willie Walsh IATA director general.

Looking forward then I can comfortably say some of the top issues likely to dominate panel discussions for next year include the following.

• Business travel: While the US travel associations are predicting a levelling off of business travel next year – that is definitely not the case in the Middle East Africa region.

• It will be important for airlines to invest in new revenue streams, focus on the numbers and continue to pay attention to real-time data and analytics.

• Sustainable aviation fuel supply chain planning - challenges surrounding SAF production, supply and demand, as well as carbon emissions tracking, require innovative solutions.

• Artificial intelligence will power operations forecasting – the industry will need new tools to keep passengers in the know, build loyalty and keep their reputation intact.

So as we end- off 2023 what could be a better way than with a deep dive into the future. Turning our attention to the world of disrupters in the aviation sector.

These start-ups are going to have a significant impact on various aspects of aviation, from the way people travel to providing efficient and sustainable air transportation.

Electric and hybrid aircraft will reduce emissions and lower operating costs. Companies like Airbus, Boeing, and Joby Aviation and Lilium are working hard on solutions for urban air mobility and regional transport.

That is why you should read our exclusive story about one such operation based in Germany called Flyv that has a solution to regional air travel and the current congested road transport space.

Without future ado, allow me to take the opportunity to thank all our clients, readers, stakeholders, contributors and contacts for all the conversations, comments and support that World Airnews has received this year.

May I wish you and your families a blessed Christmas – and other salutations if you do not follow the Christian faith - and a Happy New Year.

We look forward to 2024 with optimism, an open heart and hope for the best.

DISTRUPTING REGIONAL AIR TRAVEL

By Heidi Gibson

It's a new model for regional air transport and it can be replicated anywhere in the world. Heidi Gibson, editor of World Airnews, spoke to the two founder partners Tomislav Lang and Anton Lutz about flyv.

Disrupting the traditional airline business model, flyvbird GmbH – brand = flyv, the first regional on demand air mobility airline, is aiming to get off the ground in 2025.

One of the key aspects of this new way of regional air mobility is that it can be replicated anywhere in the world.

Think Africa. Think intra-connected small airports. Now you can think flyv.

Based in Stuttgart, Germany flyv is comprised of a team of seasoned industry experts working remotely from all parts of the world.

The two founders are - Tomislav Lang and Anton Lutz who met when Tomislav was working as a manager for an airport in Cologne. Having managed, a Swiss regional airline called Skywork Airlines from 2008 - 2013, Tomislav has more than 20 years' knowledge and experience working in the European airspace. Anton, on the other hand, has his masters' degree and is currently working for Lufthansa. He is the founding partner and CEO of flyv.

"I will never forget the day that Anton asked me why I sold my airline business. This was in 2018 just before Covid. It had to be perfect timing because after I explained what went wrong, Anton set about trying to find a solution. Covid gave us the time to put our idea together, build on it and put a business plan together. Things went to the next level when we secured two shareholders who helped to financially support us to develop the idea and do our research. At the moment we are ready to take this business to market and we are actively looking for further investment," said Tomislav.

Aimed at solving the problem for European travellers who want to get to their destination within the region as quickly, efficiently and sustainably as possible, flyv offers a means of mobility that will do away with getting stuck in traffic, waiting to catch a train or a bus or the hassle of catching a flight that usually involves queues, security checks and waiting.

"Our model puts the customer first. Using the software that Anton and Elvina built and designed, we're envisioning that our network of smaller airports will be able to provide flights every day – without a fixed schedule and based on demand," said Lang.

"Our basic goal is to save every business or traveler at least one hour a day. We want to be efficient and sustainable especially when we bring the electric-hybrid aircraft on board. We are not positioning ourselves against the big airlines, instead we see ourselves as supplementing the regional networks, getting more cars off the road, people into the air and ultimately more environmentally-friendly, "
he said.

SO HOW WILL THIS WORK?

The airline routing, frequencies will all be based on a combination of algorithms, that will allocate and adjust capacity across the network on a constant basis.

Travellers will download an app. You tell the app what you want to do – your departure and arrival destination, the


Anton Lutz

date and times and you will be provided with three different options based on how you want to get there and how flexible you can be. There is a direct option for the fastest and quickest route.

The algorithm will run the system and provide you with details of the time frame and route. Then there is a second option where travellers state that they may be a bit more flexible on times - you can depart a little bit later and arrive a little bit earlier – for example. Now the algorithm will be less constrained – perhaps allowing the aircraft to land somewhere in between the two points – and get a few more people on board. Here the cost will be lower.

And then lastly, the third option where the traveller has a lot of flexibility and the cost will be the most affordable. In all cases payment guarantees the service.

"Using machine learnings, the more passengers that book, the more we will be able to provide this route. And eventually when AI is brought on board, past passengers may even get a reminder – way in advance – reminding them to book their regular flights based on what they have done in the past," said Anton.

Operations are due to be put in place in just two years' time – funding dependent. And this is where it gets interesting.

"If there is an investor in South Africa who is interested in this type of model, we are prepared to show him/her our idea and see how this could be implemented in the country. At the moment we have someone in the Nordic region & Central European regions as well as interest from other continents and we are looking at how we could bring it there," said Tomislav.

With over 120 airports - international and domestic – across the South Africa – it may be the answer to a lot of our country's own transport problems.

FLEET

So, what aircraft will you be using? "Initially, we will use the nine-seater, piston Technam P2012 as it is modern and fit for purpose, able to land on shorter runways," said Tomislav.

The aircraft will occupy lower levels of airspace and as the business develops, it is envisaged that a new generation of hybrid-electric aircraft, such as the one on the market manufactured by American manufacturer Electra.aero, will be brought on board – providing the airline with a cutting edge to capture a share of this latent market.

"We know that there is product demand. We have done our projections so that by 2030 we aim to have between 50 to 70 aircraft and our fleet is estimated to grow to 120 by 2035. From a European perspective there will have to be flexibility as demand is seasonal – but we will adapt to this," said Tomislav.

He said the aircraft are single pilot operated and passengers will have to be trained and educated about this to assure them of the high safety standards that the company will adhere to. On board, he said, passengers will experience comforts like wi-fi, have a headset and may be able to communicate directly with pilot.

FUNDING

Back to funding. Anton said that the company does have its first lead investor from the banking sector with interests in watch manufacturing and airports. This will go towards taking the business plan one step closer to implementation.

Tomislav said all internal processes and procedures are in place dealing with all aspects of the airline especially with safety considerations.

"We are going to grow based on economies of scale and depending on connections. Then there are the assets and the infrastructure and densities – this is the second axis – with the increase in assets we will be able to offer a high number of frequencies," said Anton.

Despite the fact, the airline does not have its AOC in place, he is not worried as the paperwork is ready to be filed.

"The process of obtaining our AOC is an estimated wait of between 6-8 months. From there it will be about one year to start operations whereas Sales will start one year in advance to the first flight. Crew will be employed on a full-time basis and fully trained according to our strict high safety standards.

I will be looking for dedicated individuals who are ready to fly with us," he said.

And at least if this model does make it down south – they certainly won't have to worry about de-icing for the wings.


Tomislav Lang

GENX ENGINES ORDERED

China Eastern Airlines recently announced an order for 25 GEnx-1B engines to power its Boeing 787 fleet.

The order also includes a long-term TrueChoice services agreement. China Eastern Airlines has been a GEnx customer since 2018 when it first purchased 15 GEnx-powered Boeing 787 aircraft, plus the TrueChoice services agreement.

Since then the GEnx engine has played an important role in the airline's fleet, with excellent performance, high reliability, and outstanding fuel efficiency.

"We are grateful that China Eastern Airlines has selected the GEnx-1B engine again this year. This agreement fully demonstrates the airline's trust in our products and services. We will continue to work closely with them to support the operation of their GEnx-powered Boeing 787 fleet, underpinned by excellent fuel efficiency and leading innovative technology," said Weiming Xiang, vice-president of GE and president of GE Aerospace Greater China.

The GEnx engine family has more than 50 million flight hours since entry into service in 2011 and is the fastest-selling, high-thrust engine in GE history with nearly 3,000 engines in service and on backlog, including spares.

At present, six out of seven airlines in China that fly Boeing 787 fleets have selected the GEnx engine. The engine powers more than 90% of Boeing 787 aircraft in China, amassing a total of more than 6.8 million flight hours.

The GEnx-1B engine provides a 1.4% fuel burn savings for the typical 787 mission compared to its competition. The added fuel savings enables more than two million fewer pounds of CO^2 per aircraft annually.

Representing a giant step forward in propulsion technology, GEnx uses lightweight durable materials and advanced design processes to reduce weight, improve performance, and lower maintenance, making it the best engine choice for long-haul flights.

The two companies Eve Air Mobility and Hunch Mobility are working to bring this project to fruition by 2026.

FIRST EVTOL FLIGHTS IN BANGALORE

The first electric commuter flights will soon be a reality in Bangalore, India.

Eve Air Mobility and Hunch Mobility - a joint venture between Hunch Ventures and Blade Air Mobility - have announced that the two companies are working to bring this project to fruition by 2026.

Bangalore has now become the launch city in the region for urban air mobility flights utilising electric vertical takeoff and landing or eVTOL aircraft.

Both companies will work with local, state and federal officials, infrastructure, energy and technology providers. The goal is to ensure the appropriate infrastructure is in place to introduce eVTOL aircraft flights.

"This announcement is the next step in a great relationship that Hunch Mobility and Eve have built to co-create the urban air mobility ecosystem in India," said Johann Bordais, CEO of Eve Air Mobility.

"India is an incredibly important market for urban air mobility and our goal is to work with Hunch Mobility to provide residents with an additional efficient and affordable mode of transportation to ease commuting times in one of the most heavily populated cities in the world."

"The collaboration with Eve Air Mobility underscores the commitment to contribute to India's growth story by addressing the bottleneck of road congestion in the country.

We look forward to the introduction of eVTOL flights that will democratise short-haul air mobility by offering affordable ticket fares and zero carbon emission," said Amit Dutta, director, of Hunch Mobility.

Bangalore, located in the Karnataka state of India, is one of the most populated cities in the world with an estimated population of more than 13 million people.
The emergence of electric aviation with eVTOL vehicles is expected to significantly reduce the carbon footprint, noise and cost of flying, making it more accessible to the masses.

Eve's eVTOL is 100% electric and has a range of 100 kilometres or 60 miles offering a variety of urban air mobility missions in Bangalore. The aircraft features a lift + cruise configuration with dedicated rotors for vertical flight and fixed wings to fly on cruise, with no components required to change position during flight. It will be piloted at launch but evolving towards uncrewed operations in the future.

Eve was the first eVTOL manufacturer to announce an LOI in India with Hunch Mobility announcing an agreement to purchase 200 eVTOLs, services and the company's Urban ATM (Air Traffic Management) solution.

As part of the LOI announcement, Eve and Hunch embarked on a three-month-long pilot project, conducting intra-city helicopter flights in Bangalore. The objective was to collect data on operations and customer experiences throughout the pilot project. This data, in turn, informed the further development of Eve's eVTOL aircraft, its air traffic management solution, and solutions for service and support.

In addition to a new, efficient transportation option, Eve and Hunch Mobility noted that eVTOL flights in Bangalore are expected to have a positive economic impact on the community including new employment opportunitie.

Positions ranging from pilots and aircraft service technicians to training and technical services are among the numerous roles that will be needed as eVTOL flights are introduced and expanded. The development of the necessary infrastructure to support eVTOL operations is also expected to contribute value and employment opportunities to the community.

CONNECTING HOSPITALS

European Medical Drone, a Swedish drone operator focusing on connecting hospitals using drone transportation, and Dufour Aerospace, a Swiss eVTOL innovator, have agreed to co-operate on the purchase agreement for 11 Aero2 uncrewed tilt-wing aircraft.

The agreement includes the delivery of one Aero2 X2.3 prototype aircraft in 2024 and 10 serial Aero2 aircraft with delivery starting in 2026.

Savback Helicopters, a Swedish helicopter vendor and partner of Dufour Aerospace, is assisting in this transaction.

"Dufour's Aero2 is exactly what we are looking for, and at this stage, we do not see another product offering the same features close to market entry," said Martin Braaen, founder of European Medical Drone.

"Our mission is to facilitate the sharing of vital resources among hospitals. Our system allows hospitals to request and receive essential supplies such as blood, medicines, and medical equipment.

"As we have a focus on connecting hospitals which are several hundred kilometres apart, we need long-range, heavy-lift, uncrewed aircraft with a lot of redundancy for safety. We do have very knowledgeable partners in our project, and with the addition of Dufour Aerospace, we will be one step closer to the aim of connecting hospitals with automated, fast and reliable transportation services also in large countries like Sweden". "Dufour Aerospace shares European Medical Drone's vision and values, and our Aero2 has exactly been designed for the delivery of critical cargo over long distances, facilitating today's logistics where this is beneficial," said Thomas Pfammatter, CEO and co-founder of Dufour Aerospace.

"Connecting hospitals in a fast, reliable and efficient way makes a lot of sense in our eyes, and this will even become more important in the future. We are very happy to support European Medical Drone with our products and contribute to their activities towards building a medical logistics network to the best of our abilities. This development co-operation and purchase contract is of particular importance to us, as it confirms that our high-level specifications meet not only use cases overseas but also in Europe."

"Savback Helicopters is the sole, exclusive agent for the sales of Dufour Aerospace products in the Nordics and is proud to be a part of this groundbreaking collaboration," said Michael Savbäck, founder and CEO of Savback Helicopters.

"Together with Dufour Aerospace, we look forward to supporting European Medical Drone's mission to create a robust medical logistics network that offers swift, reliable, and efficient transportation services to hospitals in Scandinavia.

From medical logistics to search and rescue operations, and from law enforcement to aerial surveying, the Dufour Aero2 has been purposefully designed to meet the diverse needs of modern aviation. Its ability to seamlessly transition between roles and missions makes it a standout choice for a wide range of applications," said Sayback.

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PILOT, STRESS AND RESILIENCE

Article supplied by MAYDAY-SA - a volunteer South African aviation peer support programme. ICAO endorses peer support for pilots and other safety-critical personnel.

The pandemic, which created so much turmoil and distress within aviation, has now focused a very bright spotlight on the mental health of pilots and other safety-critical personnel, escalating it to one of the key priorities for ICAO.

That implies that there is an increasing obligation on pilots to know how to address and protect their mental health.

In their book 'Fitness to Fly', published after the Germanwings crash (24 March 2015), and in response to murmurings about the mental health concerns of pilots, ICAO highlighted some of the common stress points pilots face.

In most countries, including South Africa, these stress points are morphing in complex, interrelated and increasingly vicious cycles. They are occupational, operational and personal.

Listening to the stories, the word surfacing over and over is fatigue.

In South Africa, this seems to be directly related to the shortage of pilots. Operators, many of whom utilised the pandemic to renegotiate contracts, are forced into employing pilots who lack hours of experience. Many experienced pilots lost their employment during the pandemic and were forced to find employment elsewhere. Consequently, the lowered experience level places stress on training departments and ultimately increases the load on the flight crews, especially captains who need to be extra alert and more vigilant.

The understaffing of aircraft or insufficient crews means that regulations, relating to flight and duty time, are no longer being used as a restrictive guide, but rather as limits to be max-ed out. Rosters and scheduling, where it exists, is becoming increasingly unpredictable and unstable.

Fatigue places increased emotional and physical load on the crews and subsequently, gradually and subtly, impacts morale. Negativity starts to creep in as pilots feel increasingly pressurised, squeezed and out of control of their environment.

This can lead to despondency and wondering what choices exist in seeking work elsewhere or quitting? The decision is complex, and the transition is enormous.

Ask any pilot who, during Covid had to leave all that is familiar and supportive and seek employment in a foreign country. The adjustment can be very challenging. There is no time to work out how to integrate, as all energy is required to succeed in the necessary training. There is little time to work through the loss of leaving all we know and love, work out how to adapt, and contend with the continued sense of job insecurity. Back at home, there is the concern over the wellbeing and safety of loved ones.

All of this and more, reduces resilience and impacts our sense of wellbeing, which in itself, feeds into our hidden concerns for our medicals because it ensures our job security.

This is further compounded by loss of licence insurance being at a premium. Sweeping our concerns under the proverbial carpet is not a solid strategy. We need to have a different approach. What do we need to know?

Beyond Blue of Australia notes: "Mental health affects how we think, feel and act. It also affects our everyday life, such as work, relationships and study. Looking after our social and emotional wellbeing is as important as keeping our body healthy." (1)

What are you experiencing? Stress, anxiety and depression? And what can you do? We all experience stressful events professionally and personally. Aside from what is described above, we have to deal with simulator checks, type ratings, weather or aircraft maintenance faults or maybe traumatic operational events, all of which may increase our

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level of stress or even anxiety. Many of us have dealt with life-changing events such as the loss of a loved one or a painful break-up.

It is normal to experience symptoms of stress, anxiety and depression from time to time, especially if they coincide with significant stressful events.

However, if you are experiencing these symptoms on a regular basis, for a prolonged period or if they start interfering with daily functioning, it could be an indication that your body is sending you a MASTER WARNING signal. Similar to when encountering a master caution or warning in the aircraft, the contributing factors of your stress, anxiety or depression need to be addressed.

How can I recognise stress anxiety and depression in myself or others? Although similar yet different, the symptoms are evidenced in three ways: psychologically (mind), physically (body) and behaviourally (what others may notice).

You may notice or experience some of the following symptoms:

- Energy level affected
- Mood alters
- Sleep and appetite change
- Significant weight change
- Behavioral change
- Social withdrawal
- Concentration is affected
- Normal functioning is affected

PILOTS ARE RESILIENT

The word "pilot" comes from the Greek word pēdon meaning "oar" which steers a ship (1). A pilot directs and steers. As pilots we can be RESILIENT and steer ourselves through periods of turbulence in both our industry and personal lives. Here are a few helpful strategies comprising of the acronym 'RESILIENT'

WHAT	WHY	HOW
Resources I have: • Past helpful strategies • Decision making models	• Efficient use of what we are already familiar with, might increase the likelihood of applying these resources • It promotes a sense of resilience	• Use and stick to routines when faced with unsettling adjustments • Use T-DODAR or T-FOREDECK • Aware of situation and how it's affecting me; Evaluate options; Choose from options
Exercise	• Improves concentration, memory and decision making; increase stability of mood and emotions; reduces adrenaline state; improves sleep6	• Use available time and space • Develop a habit of regular exercise
Sleep	Includes the following improved fucntions[8]: • General wellbeing • Memory consolidation • Metabolic functions • Sufficient performance	• Exercising, nutrition and dealing with stress and anxiety can help to improve sleep • No white/blue light (cellphone or computer) 30min before bed • Slow down bed time routine where possible
Inhale and exhale – focused breathing and progressive muscle relaxation.	• Shift occurs from emotional brain to thinking brain • Helps to break the stress cycle[2] • Calms down 'fight or flight' response and activates 'rest and digest' response[3]	Progressive muscle relaxation[7]: • Tensing groups of muscles and then consciously relaxing them Focused breathing[7]: • Inhale through nose for four counts, hold for seven, exhale through mouth for eight counts. The aim is to breath in your belly rather than the chest and shoulders
Let go	• Creates possibilities for more positive outcomes	• Let go of what does not serve me e.g.: past mistakes, energy drains, limiting beliefs and what I can't control
Invest in myself	• If I am not ok, those around me might eventually be negatively affected • Selfcare activities can help to release brain chemicals responsible for improved psychological wellbeing	• Talk to someone I trust to access support • Boundaries – say "No" when I need to • Do activities I enjoy – even if for a few minutes
Emotions	• Review my decision making, using models like TDODAR or T-FOREDECK • When emotions are identified and dealt with, a shift occurs from using the emotional brain to the thinking brain which allows processing and problem solving • Reduces anxiety • Improves control	• What am I feeling? • Triggers? • Helpful response? • Don't ignore emotions • Don't act on intensity of emotions • See them as 'messengers' • Treat them as 'visitors', not 'residents'
Nutrition	• Improved mental and physical functioning	• Water to stay hydrated • Choose healthy option when there's a choice
Thoughts	• If I don't control thoughts, they control me • Negative thoughts adversely affect mood and emotions and decreases coping	• What am I thinking? • Is it helpful? • What can be more helpful thoughts about same situation?

STRESS | ADVISORY is a normal response to a threat/ abnormal situation. It is our fight or flight response There is good stress (eustress): a sense of arousal motivating us to achieve our goals, and bad stress (distress) which can trigger emotions of fear and anxiety(2). We experience stress everyday as it is our reaction to immediate life events.

ANXIETY | MASTER CAUTION is a response of fear to a vague, unknown or perceived threat that has not yet taken place (3). Anxiety can be associated with the "what if" scenarios we play out in our mind. The bigger the perceived negative impact of an event, the greater the anxiety we experience. Anxiety can also leave us feeling overwhelmed.

DEPRESSION | MASTER WARNING is a psychological state of feeling sad or emotionally numb, negativity and low mood. If depressive symptoms persist and interfere with daily functioning, a referral to a mental healthcare provider may be required. If left unchecked, constant stress and anxiety could lead to depression.

MAYDAY-SA is South African aviation's peer support programme. As a volunteer team of pilots, ATCs, cabin crew and engineers, we are trained to support you confidentially, whatever you are experiencing. ICAO endorses peer support for pilots and other safety critical personnel. Aside from your AME, other professional support services available to you are:

- **LIFE LINE:** Free 24-hour confidential telephone counseling for crisis intervention: 0861 322 322 www.lifeline.co.za
- **SADAG:** South African Depression and Anxiety Group ~ Helplines providing free telephonic counselling, information, referrals and resources 24 hours a day: 0800 21 22 23, 0800 70 80 90 or 0800 456 789
- **FAMSA:** Families South Africa ~ Couple and Family related counselling (011) 975 7106/7 www.famsa.org.za
- **SUICIDE HELPLINE:** 0800 567 567 www.sadag.org
- **SANCA:** SA National Council on Alcoholism and Drug Dependence 011 892 3829 or 076 5351701 (WhatsApp) www.sancanational.info
- **AA: ALCOHOLICS ANONYMOUS:** National helpline: 0861 HELPAA (435 722) www.aasouthafrica.org.za
- **NA: NARCOTICS ANONYMOUS**: National 24-hour helpline: 083 900 MY NA (083 900 69 62)

You may ask your company who your employee wellness service provider is and contact them.

RESOURCES

1. *https://www.beyondblue.org.au*
2. *Fitness to Fly – A Medical Guide for Pilots. 1st Edition. 2018. ICAO*
3. *Bergland, C. (2013) Cortisol: Why the 'Stress Hormone' is public enemy no. 1, Psychology Today. Available at: https://www.psychologytoday.com/za/blog/the-athletes-way/201301/cortisol-why-the-stress-hormone-is-public-enemy-no-1# (Accessed: 2018).*
4. *Ernstmeyer K, Christman, Ed. (2022) Nursing: Mental Health and Community Concepts. Chippewa Valley Technical College. Chapter 9 Anxiety Disorders. Available from: https://www.ncbi.nlm.nih.gov/books/NBK590031/ (Accessed: 2023).*
5. *Pathological anxiety: Definition, causes, and symptoms. Medical News Today. (Accessed: 2023).*
6. *www.vocabulary.com*
7. *Master Homan, W. J. (2002). Stress Coping Strategies for Commercial Flight Crewmembers. Journal of Aviation/ Aerospace Education & Research, 12(1). DOI: https://doi.org/10.15394/jaaer.2002.1592*
8. *Your Breath, Master Your Health: The Transformative Power of Controlled Breathing. Neuroscience News. (2023). https://neurosciencenews.com/controlled-breathing-health-23594/# (Accessed: 2023).*
9. *Miletínová E, Bušková J. Functions of Sleep. Physiol Res. 021 Apr 30;70(2):177-182. doi: 10.33549/physiolres.934470. Epub 2021 Mar 8. PMID: 33676389; PMCID: PMC882057 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8820572/ (Accessed: 2023)*

ORDERS GALORE AT DUBAI

This was by far the busiest Dubai Air show since 2017. It's impossible to provide a comprehensive round-up of every order placed, aircraft type on display static and in the air – let alone provide an in-depth look at the many different eVTOL types in various stages of testing and certification.

There was also a strong military and defence sector as well as an aerospace and start-up platform.

Therefore this article serves to highlight only the most important and memorable from the four days of non-stop action.

First the flypast – any airshow highlight – that showcased nearly every type of aircraft in military or commercial service of the United Arab Emirates, including the Italian air force Frecce Tricolori and the PAC/Chengdu JF-17 Thunder displays.

There was the UAE's F-16 Block 60 Desert Falcon fighter and the Qatari Boeing F-15QA in which a Boeing test pilot performed a spectacular flying display amongst others.

By the end of the event the published number of airliner deals had reached around 370 – with Boeing dominating and widebodies driving demand. However, as ever, these numbers also included options, Mou and previously booked orders that were now identified with named airlines.

Middle East carriers Emirates and Flydubai were first off the mark with a bumper deal, a massive order for 90 of its 777 wide-body jets for Emirates at a list prices of (US) $52 billion, followed by an (US) $11 billion order from the Emirates subsidiary and low-cost carrier Flydubai for 30 of its first-ever-ordered 787 Boeing Dreamliners.

Following on was further widebody business from Ethiopian, Royal Jordanian and Royal Air Maroc.

African carrier Ethiopian Airlines made history when it signed the largest aircraft purchase in Africa's history. Under its Vision 2035 strategy, the airline signed a contract for up to 67 jets.

The order includes 11 Boeing 787-900 Dreamliners and 20 Boeing 737 MAX aircraft – the first since the fatal crash some four years ago. There is an option for an additional 36 jets over the next three years.

Ethiopian operates Africa's largest 787 fleet with a mix of 787-8s and 787-9s. The new narrowbody order grows its 737 MAX backlog to 50. It currently serves over 130 international destinations.

"By 2035 we should be one of the top 20 global leading airlines," said Ethiopian Airlines Group CEO Mesfin Tasew. "The number of airplanes that we ordered is just one step forward."

It reflects renewed confidence in the MAX improvements, the airline CEO noted, after the fatal 2019 crash that claimed the lives of all 157 on board.

"The accident of the MAX... has left a big scar in our memory," Tasew said. "We have checked and confirmed that the design defect of that aircraft has been fully corrected by Boeing, and we have renewed our confidence in that aircraft."

Decoy flares lit up the underside of a UAE Air Force Boeing C-17 Globemaster 111 airlifter to provide a spectacular finale during the opening flypast of the Dubai Airshow. Generally used to protect the aircraft, they create an impressive firework display when released all together. Photo credit Mark Wagner Aviation Images

As far as the Max is concerned, Boeing secured 138 commitments at the show, just over half of which are firm deals. That included an order from SunExpress for 45 firm and 45 options for 737 Max 8s and Max 10s.

Airbus was totally outshone by Boeing but Emirates closed the show with an order for 15 Airbus A350-900 – a welcomed deal that was also lauded by UK engine manufacturer Rolls Royce.

EgyptAir signed for 10 A350-900s, and Ethiopian also signed an MoU for 11 A350-900s.

The latest Airbus agreement takes Ethiopian Airlines' total order book and commitment for the A350 to 33, including four A350-1000s.

Currently the carrier operates a fleet of 20 A350-900s and this commitment confirms its position as Africa's biggest A350 customer.

Again Ethiopian Airlines group CEO Mesfin Tasew said, "We are excited to place this commitment for 11 Airbus A350-900s. As a customer focused airline, we are particularly excited for this fleet as it offers extra comfort to passengers with its features like the quietest cabin in its class and ambient lighting. We are keen to expand our fleet size, acquiring the latest technology aircraft to offer a convenient and memorable onboard experience to our esteemed passengers."

All in all, Airbus business at Dubai included 30 firm orders and 20 more purchase rights for A220 narrowbodies.

But while there were some noteworthy deals, this show was notable for the rumoured deals that didn't happen. Both Riyadh Air and Turkish Airlines were tipped to place big orders but backed away from announcing them.

Underlying this is not only current uncertainty about the impact of Israel-Gaza conflict on air travel but also the current supply chain challenges and spare parts issues, which means that the biggest challenge for OEMs remains delivery of a huge backlog to existing customers - rather than racking up new sales.

On the regional side, ATR secured a follow-on order from lessor Abelo for 10 firm ATR 72-600s and 10 options.

ENGINES

The Dubai Airshow also brought success for MTU Aero Engines on the back of the Emirates order- for 202 GE9X engines for its Boeing 777X aircraft.

MTU holds a four percent share in the GE9X and is responsible for the turbine centre frame.

"The orders are worth more than half a billion dollars for the company. This proves that aviation is a growth market, and that the widebody segment is becoming increasingly attractive again," said MTU chief programme officer Michael Schreyögg.

African carriers TAAG Angola Airlines and Royal Air Maroc also opted for widebody engines with MTU participation.

TAAG ordered nine GEnx-1B engines for its Boeing 787 Dreamliner and Royal Air Maroc four.

The Airbus A220 with its PW1500G geared turbofan engine also scored well in Dubai with Air Baltic placing a firm order for 30 A220 aircraft.

MTU's 17 percent share in the PW1500G comprises various stages of the high-pressure compressor and the high-speed low-pressure turbine as well as brush seals.

OUTLOOK

Darren Hulst, vice president of Commercial Marketing, presented the 2023 Middle East Commercial Market Outlook (CMO) and a product overview providing a comprehensive market analysis. He said that demand is for versatility.

"Customers are looking for aircraft that can do more than just one route. Ultimately they want more capacity at the lowest risk/cost," he said.

Referring to the forecast that placed the single aisle as having the biggest segment, he said that this due to demand coming from customers who want to fill the domestic and regional routes as well as the emergence of low-cost carriers,".

He said the Max 737-10 has more range than any other aircraft in the same segment that does not have auxiliary fuel tanks.

The People's Liberation Army Air Force August 1st or Ba Yi Aerobatic Team is named after the date of the founding of the People's Liberation Army, August 1st, 1927. The team flew the Chengdu J-10 multirole fighter. Credit Mark Wagner Aviation Images

Emirates closed the show with an order for 15 Airbus A350-900 – a welcomed deal that was also lauded by UK engine manufacturer Rolls Royce.

MILITARY AND DEFENCE

On the military side of the house, there was, as expected, much attention on fighters, missile defence and armed drones – a consequence of ongoing lessons from Ukraine.

With Russian companies now persona non-grata at other shows such as Paris and Farnborough, the show was also an opportunity for them to exhibit their wares - with an Il-76, Ka-52 and other helicopters on display.

Notable in its absence at the show was UAC's Su-75 Checkmate single-engine fighter, launched at the Dubai Air Show in 2021.

With the UAE hosting COP28 later this month, there was also a big focus on sustainable aviation and in particular the Advanced Aerial Mobility sector – with its promise of zero- or low-emission air transport.

The region's approach to embracing innovation means that Dubai and the UAE are at the forefront of this revolution. Finally, this show saw an even bigger focus on space – with the UAE having its own Mars mission that featured two astronauts who have flown in space. This and a planned mission to the asteroids took centre stage.

The UAE Space Agency revealed the MBR Explorer timeline – this a measure of the journey this craft will take for the Emirates Mission to Asteroid Belt (EMA).

The MBR Explorer is scheduled to be launched in March 2028 and will make a rendezvous with the seventh asteroid 269 Justitia in 2034. At the show the UAESA revealed exactly when the explorer will make use of the gravity of Venus, Earth and Mars to push itself forward and achieve the goal of travelling 5 billion kilometres.

This platform is likely to grow in size in future as the 'new space' sector of commercial space companies gathers pace.

Boeing and African carrier Royal Air Maroc announced a repeat order for the 787 Dreamliner, confirming two 787-9s in its order book. The carrier currently operates nine Dreamliners.

Boeing and Royal Jordanian announced an order for four 787-9 Dreamliner jets. Jordan's flag carrier also reconfirmed a previous order for two 787-9s, bringing its total 787-9 backlog to six.

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VIPER SHIELD SOARS

Full compatibility with APG 83-AESA Radar means stronger protection for the aircraft - and better situational awareness for the customer.

In today's complex battlespace, F-16 aircrews rely on seamless system coordination to anticipate and counter threats with speed and precision.

L3Harris' advanced Viper Shield electronic warfare (EW) suite is proving it's more than up to that challenge.

During the recent Drop 2 integration event at Lockheed Martin's Systems Integration Lab, Viper Shield demonstrated full radio frequency compatibility with the F-16's on-board APG-83 active electronically scanned array (AESA) radar.

The testing included continuously exposing Viper Shield with APG-83 energy for more than 12 hours to test whether the radar pulses would interfere with EW functionality.

The test proved Viper Shield's ability to filter out signal processing streams from the APG-83 radar pulses without any performance compromise.

In short, Viper Shield passed the test and demonstrated seamless interoperability, which means the customer will enter the battlespace protected by the most advanced EW and radar capabilities available.

"Situational awareness is essential to mission success, especially in highly dynamic and unpredictable situations," said Patrick Creighton, vice president and general manager, of L3Harris electronic defensive solutions.

"When these two systems work in concert, they're able to effectively detect and protect against threats like never before." The Drop 2 event marked the second interoperability test for the two systems; the first took place in mid-2022, with similarly successful results.

"These tests continue to highlight Viper Shield's advanced capabilities and ability to integrate smoothly with the F-16's on-board systems," Creighton said. "That all adds up to more effective missions for decades to come."

Viper Shield's success is already spreading worldwide, with multiple international partners already committed to the system with many more air services around the globe engaged in discussions on Viper Shield as well.

Introduced in 2021, Viper Shield EW is custom-designed to provide protection and offensive EW capabilities on the fourth-generation Lockheed Martin F-16 Block 70/72 multirole aircraft.

Software-defined technology components create a virtual electronic shield around the aircraft, revealing digital radar threats and providing robust countermeasure capabilities in a fully integrated, internally mounted system.

With lower lifecycle costs, easier upgrades, increased reliability and reduced weight, Viper Shield sets a new industry standard as the highest-performing, lowest-risk and most cost-effective EW system for advanced F-16s.

The Viper Shield capability is also available to be configured in a pod solution for roll-on/roll-off capabilities.

All Viper Shield configurations, internal and pod, use identical Line Replaceable Units (LRUs) and therefore provide the same level of advanced performance on all platforms.

The common LRUs also help to ensure fleet logistics and operational availability.

The common hardware solution set reduces program life-cycle costs and improves operational availability since all LRUs can be interchanged across all platforms, including pod platforms.

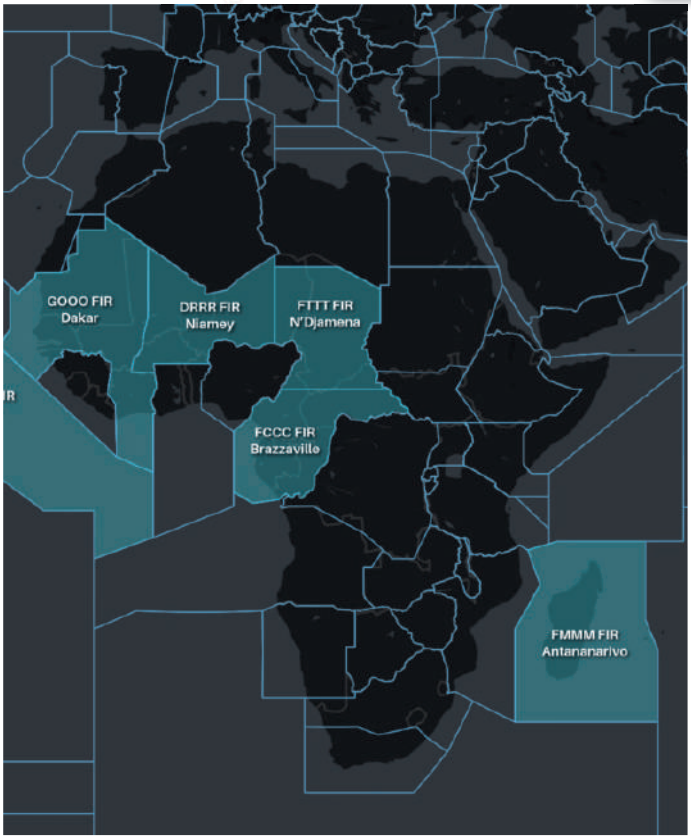
FREE ROUTING AIRSPACE IN AFRICA

Co-operation, collaboration, and commitment of stakeholders, including Civil Air Navigation Services Organisation (CANSO), African Airlines Association (AFRAA), International Air Transport Association (IATA), International Civil Aviation Organisation (ICAO), and Air Navigation Service Providers (ANSPs) have made free routing flights a reality for the first time in Africa.

AFRAA said, "In the Free Routing Airspace (FRA) Trial kick-off workshop, participants co-ordinated with all relevant operational services and secured approvals for the two trial flights. Shortening the flight time, flights ET935 and KQ 508 operated safely outside the existing routes directly from Addis Ababa to Abidjan and Nairobi to Accra, respectively."

According to AFRAA, Implementing the Free Routing Airspace will "annually bring significant cost savings to the participating airlines and will support a sustainable future for the African Industry. Cumulating over a year, the shortened flight time on one of these one-way flights avoids burning 292 metric tonnes of fuel, prevents the emission of 340 metric tonnes of CO^2, and reduces the operator's fuel bill by an estimated (US) $310,000.

Assuming similar savings on the return leg, extending free routing flights to 20 daily flights, the operators' CO^2 footprint will be reduced by five million metric tonnes, and the airlines will cut more than (US) $1.2 million from their fuel bill."



The project kick-off workshop was graciously sponsored by AFREXIMBANK. Various ANSPs provided navigation services to the historic flights, including: Ethiopia CAA, Kenya CAA, CAA Uganda, RVA (DRC), ASECNA, NAMA (Nigeria), and Ghana CAA.

The FRA project is one of the five LAB Projects of the African Aviation Industry Group African Aviation Sustainability Laboratory to revamp Air Transport in Africa that was held in Kenya last year.

AFRAA said, "The next trials in the first quarter will contribute to making the FRA a reality in 2024."

KQ HUB IATA ACCREDITATION

African national carrier, Kenya Airways and its Nairobi hub have been awarded a certificate of accreditation by IATA's Safety Audit for Ground Operations (ISAGO) for outstanding ground handling services.

This follows the successful audit conducted on ground handling operations at Nairobi's Jomo Kenyatta International Airport (JKIA) which recognised KQ for maintaining high standards in ground handling services as well as the unwavering commitment to ensuring the safety and security of passengers, aircraft and goods.

The successful audit is a testament to Kenya Airways' unwavering dedication to the safety and well-being of its passengers, employees, and all stakeholders. The rigorous assessment, carried out by independent ISAGO auditors, covered a wide range of ground handling aspects, including baggage handling, aircraft loading, and safety protocols.

Director of safety, quality and environment at Kenya Airways Haig Anyonyi said, "We are excited about this achievement. The ISAGO station accreditation is an important milestone for Kenya Airways, reflecting our continuous pursuit of excellence in all aspects of our operations. This accreditation will provide confidence to our passengers, customer airlines, and the regulators on our safety, security and quality measures of ground handling services. We are dedicated to ensuring that our passengers experience world-class service to all our customers."

Kenya Airways remains focused on delivering exceptional service to its passengers while adhering to the most stringent safety standards and has been an IOSA (IATA Operational Safety Audit) registered airline since 2009.

MAGNETIC NAVIGATION - A BACKUP TO GPS

For many the term 'magnetic navigation' brings to mind the trusty magnetic compass. Now there is a whole new - and much more modern - meaning to the term.

Magnetic navigation - or MagNav - offers the promise of an alternative means of precise global navigation, should a GPS signal become unavailable.

MagNav uses the local magnetic field lines that surround the globe, which are generated by movements of the earth's solid inner core and molten outer core. Other forces on the magnetic field (including magnetisation of the earth's crust) cause distortions in these lines, and these distortions vary depending on location.

This crustal magnetic anomaly field can be mapped - with any point on the globe able to be identified by its unique crustal anomaly configuration.

While GPS has become the standard for position location and navigation, relying on a satellite signal has its drawbacks. Signal blockage or reflection can cause problems at or near the ground, and any issue with the satellite itself can affect users. In a worstcase scenario, were the satellite system to be attacked or made unresponsive, an alternative could provide a crucial backup.

MagNav will work anywhere - land, sea, or air - and it's not affected by weather. In terms of security, there is no attackable infrastructure, it emits no signal, and it is nearly impossible to jam.

All this holds clear appeal to the US military. In a groundbreaking trial earlier this year, the US Air Force, in collaboration with the Massachusetts Institute of Technology (MIT), flew three C-17A Globemaster IIIs using real-time MagNav, marking a first such use of the technology in department of defence aircraft.

The aircraft were flown by the department of the air force-Massachusetts Institute of Technology artificial intelligence accelerator (AIA) MagNav project team from Travis AFB to Edwards AFB in California during exercise Golden Phoenix in May.

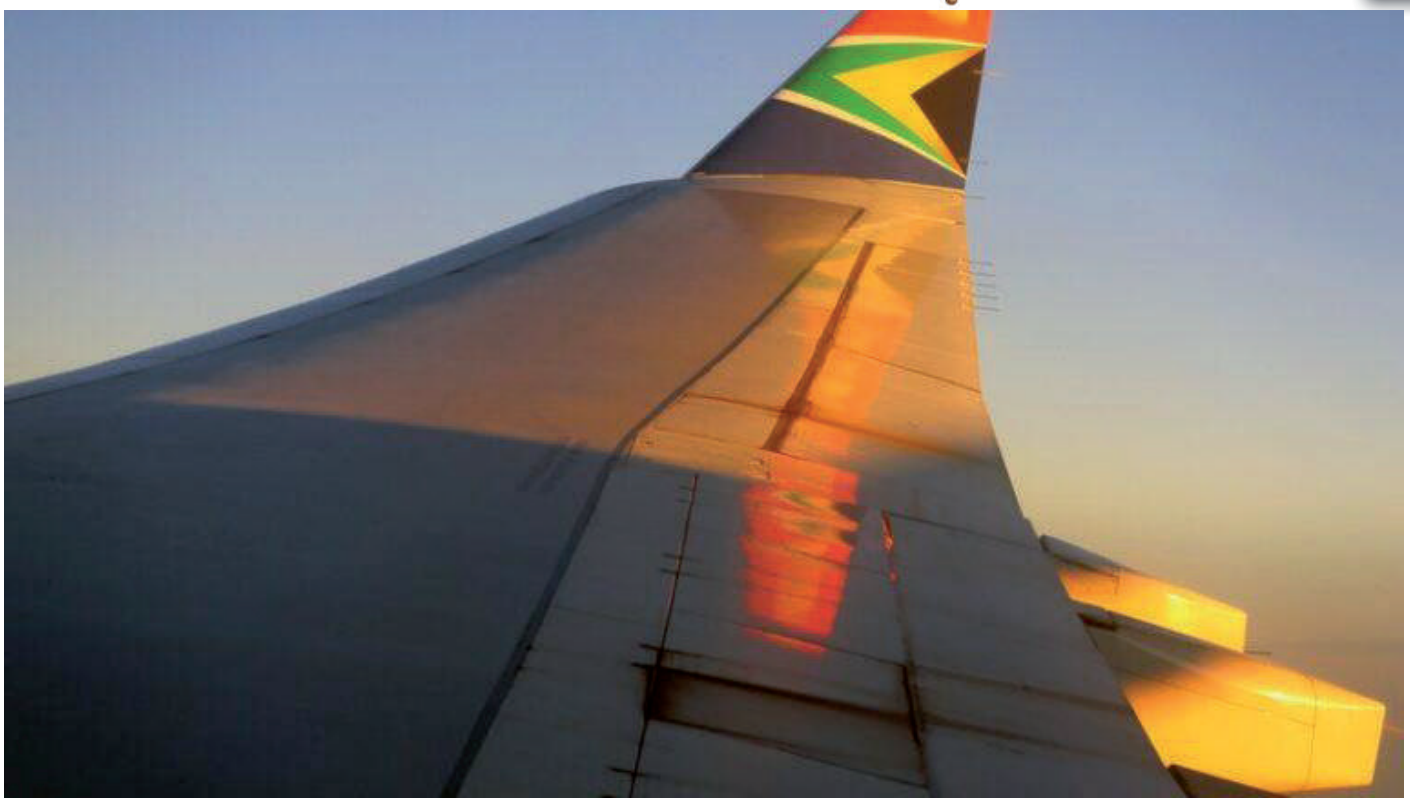
The AIA MagNav team used artificial intelligence and machine learning through the AIA's calibration and positioning neural network, which the air force test centre said was trained during the flight "in a matter of minutes on a commercially available laptop."

The team leveraged global collaboration to improve the AIA's neural network architecture, which helped remove the aircraft's "magnetic noise" to pinpoint its position in comparison to a known magnetic map.

The Air Force said a technical report will soon be presented to the US government, informing future MagNav experiments for other DoD platforms, including submarines, hypersonic glide vehicles, and small UAS.

"Every pilot fears single points of failure," said Major Kyle McAlpin, AIA MagNav liaison, in a recent press release announcing the MagNav demonstration.

"Our strategy documents lament the DoD's over-reliance on GPS - a single point of failure in our ability to navigate precisely. The next fight demands unassailable positioning and navigation. We can achieve that by augmenting GPS with alternatives like celestial navigation, signals of opportunity, visual navigation, and magnetic navigation."



SAA SOARS AGAIN:
DIRECT FLIGHTS TO BRAZIL RESUME

By Robyn Rabec

South African Airways (SAA) relaunched direct flights to Brazil, nearly four years after it discontinued air services on some of its routes, including to São Paulo, as part of the restructuring programme during the business rescue process.

South African Airways (SAA) is making a triumphant return to the skies, announcing the resumption of direct flights to Brazil, a route discontinued almost four years ago during the company's restructuring efforts under the business rescue process.

The Department of Public Enterprises (DPE) has officially confirmed this exciting development, marking a significant milestone for the national carrier. SAA's return to Brazil represents its first intercontinental route since successfully emerging from the challenges of business rescue.

On October 31, SAA's inaugural flights to São Paulo will depart from Cape Town, followed by flights from Johannesburg commencing on November 6.
This announcement coincides with the two-year anniversary of SAA's return to operation, which will be celebrated with an official relaunch ceremony led by DPE Minister Pravin Gordhan.

Minister Gordhan expressed his enthusiasm for the São Paulo route's relaunch, emphasizing the remarkable progress SAA has made since narrowly avoiding liquidation. He remarked, "The upcoming event marks a very significant step in the resurgence of South African Airways. We look forward to the official relaunch of SAA, along with the introduction of its first intercontinental flight to São Paulo, Brazil."

SAA's flights to São Paulo will operate four times a week, with departures from both Cape Town (Tuesdays and Saturdays) and Johannesburg (Mondays and Thursdays) to Guarulhos International Airport in São Paulo. This development signifies a promising and exciting chapter in SAA's journey of recovery and expansion.

Learn about the launch off SAA's first inter-continental route from Johannesburg and Cape Town to Sao Paulo, Brazil. This video and story put together by our correspondent Robin Rabec. Click here www.worldairnews.co.za.

Get ready to SAAmba. Brazil is offering direct flights from both Cape Town and Johannesburg. No stop overs. Booking now open.

Photo by Ross Parmly on Unsplash
Boeing has joined the Aviation Initiative for Renewable Energy in Germany.

A SUSTAINABLE AVIATION FUTURE

Boeing has joined the Aviation Initiative for Renewable Energy in Germany or aireg underscoring the company's commitment to partner towards a more sustainable future for air travel and progress on sustainable aviation fuel.

aireg and Boeing are driving the development and use of SAF or Sustainable Aviation Fuels that could reduce CO^2 emissions by up to 85% over the entire fuel life cycle compared to conventional jet fuel.

"On behalf of the aireg board and our members, I am extremely pleased that Boeing is becoming a member of our association," said Siegfried Knecht, chairman of the aireg board.

"Boeing has already supported our initiative in the past and we will now jointly drive the development, production, supply, and delivery of SAF in cooperation with CAAFI or the Commercial Aviation Alternative Fuels Initiative in the US."

Boeing is committed to delivering all its commercial aircraft 100% SAF compatible by 2030 and is working with airlines, industry partners, governments, and research institutions worldwide to increase the availability and reduce the cost of SAF.

"We recognise our responsibility to make aviation more sustainable, and working with stakeholders such as aireg is essential to progress on meeting industry goals," said Michael Haidinger, president Boeing Germany.

"We will support aireg with our global resources and expertise to work together to reduce the environmental impact of aviation."

Boeing supports commercial aviation's 2050 net zero emissions goal by developing new, more efficient commercial aircraft, investing in new technologies, and advancing partnerships to scale up sustainable aviation fuels (SAF). Boeing's newest airplanes like the 737 MAX, 787 Dreamliner, and 777-9 are between 20 to 30% more efficient than the in-service aircraft they replace.

aireg
Aviation Initiative for
Renewable Energy in Germany e.V.

ABOUT AIREG

aireg or the Aviation Initiative for Renewable Energy in Germany e.V. was founded in 2011 as an association of companies and organisations from industry, research, and science.

As a non-profit initiative, aireg is committed to the availability and use of renewable energies in aviation to achieve the ambitious CO_2 reduction targets of the aviation industry.

The members come from all areas of the value chain of renewable energies for aviation including research at universities, plant manufacturers and operators, biorefineries, the petroleum industry, engine and aircraft manufacturers, governmental organisations, non-governmental organisations, and airports to airlines. The industrial members internationally cover a broad international spectrum, from start-ups to large corporations.

CELEBRATING **COURTESY TRAINING**

Gulfstream Aerospace Corp and FlightSafety International recognised the 10th anniversary of their complimentary ground handling and servicing training programme.

Tailored for line service technicians, the programme is designed to improve dispatch reliability and increase safety for Gulfstream aircraft and the people who support the aircraft.

It features explanations and demonstrations of best practices for handling and servicing Gulfstream aircraft, including parking, walkarounds, fuelling, towing, snow and ice removal and more.

Gulfstream covers the cost for fixed base operator (FBO) personnel to complete the course annually. To ensure this quality training service is available, it is accessible online anywhere, anytime.

"We value our partnership with FlightSafety International, and we're pleased to work with them to offer this complimentary service to technicians at the FBOs our customers rely on. Since the programme's inception, there have been 26,000 ground handling and servicing training course enrolments."

Over the past decade, the programme has evolved and expanded to support Gulfstream's growing fleet. Today, it includes training customised for technicians handling Gulfstream G150, G200, G280, G450, G550, G650, G500, G600, G700 and G800 aircraft.

For more details about this programme and how to enrol email fbotraining@gulfstream.com.

CFM56-7B TEST CAPABILITIES

StandardAero can now provide CFM International CFM56-7B turbofan engine test services from its DFW Centre of Excellence at Dallas/Fort Worth International Airport.

StandardAero recently completed test cell correlation for the popular CFM56-7B powerplant at its state-of-the-art, six-cell DFW test complex.

The introduction of the new capability enables StandardAero's DFW team to undertake pass-off testing for workscopes undertaken at its 220,000 feet² DFW-based CFM56-7B service centre opened earlier this year. The correlated test capability also allows Boeing 737NG operators and other CFM56-7B asset owners to ensure the performance of their powerplant following line maintenance or long-term storage, or to perform exploratory engine runs to investigate potential issues.

StandardAero holds CFM International General Support License Agreement (GSLA) approval for the CFM56-7B, and the DFW Centre facility added the engine to the operations specifications for its FAA Part 145 Repair Station at the beginning of 2023.

The first of four dedicated gantries were introduced shortly thereafter. CFM56-7B capabilities offered at the location include 'quick turn' services such as borescope inspections, boroblend repairs, engine module changes and QEC/LRU removal/installation, along with fan, top case, bottom case, hot section and LPT repairs.

"The introduction of this service has generated overwhelming interest from customers far and wide, and we are proud to deliver on our promise of adding test capabilities at the location," said Jay Aiken, vice president Turbofan sales, airlines and fleets for StandardAero.

"We have exciting growth plans for our DFW-based CFM56 activities, and look forward to meeting the needs of the CFM56 operator and owner community for decades to come."

StandardAero currently provides a full range of MRO capabilities for the CFM56-7B from its CFM- and GE Aerospace-approved facility in Winnipeg, MB, Canada, which first commenced support of the engine as a GE Designated Fulfillment Centre (DFC) in 2009.

SAFRAN DEVELOPS FLAT ANTENNAS

Safran Data Systems is developing antennas featuring cutting-edge electronic scanning technology.

Safran Data Systems is developing antennas featuring cutting-edge electronic scanning technology. These 'flat' antennas, which require no mechanical movement, will make it possible, for example, to track constellations of satellites in low earth orbit – an unprecedented solution for space exploration.

Whether for defence projects or civil satellite constellations, electronically scanned antennas represent a real technological breakthrough.

Their electronic components make it possible to control antenna directivity and pointing directions and even multiply the number of beams.

The compactness of these antennas, and the possibility of discreet installation, are particularly well-suited to the needs identified for electromagnetic intelligence gathering applications.

With the support of the Centre National d'Etudes Spatiales or CNES, an S-band hybrid prototype has been finalised. The antenna is now operational and will be put through its paces in satellite reception and spacecraft telemetry tests until mid-2024.

This new technology is the result of studies that first began in 2014 with the X-Selans joint laboratory, which relies on the XLIM university laboratory in Limoges, specialists in radiating elements.

Together, they brought this cutting-edge technology to fruition, in the process receiving financial and technical support from CNES.

Safran Data Systems aims to develop future generations of ground stations for communication with space, to consolidate its position as a world leader in ground stations for the space and flight test markets.

Safran Data Systems is involved in other antenna projects in the same segment, such as;

The CHOSE (Connectivité Haut Débit Optique et SatellitairE) project, funded by the French Civil Aviation Authority (DGAC), will demonstrate a Ka-band 2D electronically scanned antenna for on-board aircraft connectivity and,

The SHIFT (Sustainable tecHnologles enabling Future Telecom applications) project, funded by the European Union, will demonstrate an X-band multi-contact electronic scanning antenna that can receive signals from two satellites simultaneously for image telemetry.

The company's involvement in large-scale collaborative projects highlights the maturity and reliability of Safran's solutions in the highly competitive and strategically important space sector.

CONVERTED AIRFRAME

Bulgarian outfit Cargo Air has been tasked with operating an extra flight into Malta International Airport. The Boeing 737-86J(SF) is a recent addition to the fleet having only been converted in September 2023. LZ-CGE is a 21-year-old airframe that was originally delivered to Air Berlin in February 2002 as D-ABBE before moving to Russia where it flew for Orenair and Royal Flight among others. *Photo credit: Mario Caruana / MAviO News*

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Pic: Pilatus Aircraft Corp.

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AFRICA AEROSPACE & DEFENCE 21-25 SEPT 2022

VSR700 COMPLETES FLIGHT TESTS AT SEA

By Helen Chachaty

Airbus Helicopters' uncrewed VSR700 rotorcraft completed its latest flight test campaign that demonstrated its ability to take off and land in fully automatic mode on a French navy frigate.

The flight test campaign took place on board the Provence frigate off the Mediterranean coast recently. The VSR700 demonstrator flew for more than eight hours over seven flights, the longest of which was almost two hours.

"These tests enabled us to validate the drone's ability to operate from a warship, to take off and land autonomously, and to carry out surveillance and intelligence missions," said Nicolas Delmas, head of the VSR700 programme at Airbus Helicopters.

"We want to avoid human intervention as much as possible, because operational conditions at sea are not compatible with piloting as we know it today."

The demonstration also confirmed the aircraft's ability to operate in a harsh environment, Delmas said. That includes the electromagnetic environment of a combat ship and complications that arise from the atypical winds and air currents for this particular multi-mission frigate, he said.

The test mark the end of a de-risking study awarded to Airbus Helicopters and the Naval Group by French defence materiel agency DGA in December 2017 as part of the French navy's air drone system (SDAM) programme for the French navy.

The programme requirements call for a rotary-wing uncrewed aircraft system (UAS) to operate as a remote sensor on the back of a warship and perform intelligence, surveillance and reconnaissance missions.

The platform should carry two payloads – which the VSR700 does. The UAS integrates an L3Harris Wescam MX-10 EO/IR low-weight imaging system and a radar produced by France's Diades Marine. It also has an AIS shipping identification receiver.

The VSR700 is based on the Guimbal Cabri G2 light helicopter, "an aircraft with unrivalled flight performance," said Delmas. The I4Drones mission system was developed by Naval Group, which was also responsible for integrating the system onto military vessels.

Final contract negotiations are underway with the DGA, with a decision expected to be made before year's end.

"We are ready," Delmas said. Airbus Helicopters is proposing an initial operational capability in 2026 and is therefore counting heavily on being chosen soon as part of the SDAM programme.

The military programming law calls for eight systems by the end of 2030 and "at least 15" by 2035.

Airbus Helicopters also plans to offer the VSR700 for export.

The manufacturer signed a memorandum of understanding with Korean Air in 2022 to initiate potential joint development and has reportedly entered into other, unofficial partnerships.

"The VSR700 is versatile and flexible enough for both military and civil applications, so it's a very promising programme," Delmas said.

Photo credit: Airbus

CHALLENGES FACE CARGO

Sentiment in the air cargo market continues to trend sharply below Covid-era highs, as rising capacity, lower rates and weak demand trends contribute to a challenging backdrop for the sector.

Speakers at The International Air Cargo Association's (TIACA's) executive summit in Brussels this week said they were working on the basis that air cargo demand would be down 4% for the whole of 2023.

They note some improvement heading towards year-end – which is also reflected in IATA's latest data, which shows that air freight demand was up 1.9% year on year in September, albeit on capacity some 12% higher – but key indicators such as the Purchasing Managers Index still suggest production levels are declining.

The demand outlook into 2024 is further muddied by factors including questions about the strength of the global economy and the impact of geopolitical tensions – both of which do not bode well for trade volumes.

With those challenges and more in mind, there was a high degree of caution among executives regarding prospects for any near-term pick-up in freight demand.

"I'm optimistic that by the latest Q4 next year, demand is going to start to pick up," said Turhan Ozen, chief cargo officer at Turkish Airlines, during a panel debate at the summit, offering one of the more positive perspectives among speakers.

"Of course, geopolitical challenges, risks, wars or possible threat of wars, any kind of conflict can jeopardise this," he adds.

Still, Ozen hopes that with European and US governments able to focus more on economic growth and less on dealing with high inflation in the coming months, "air cargo will be the first to react very, very positively".

Speaking on the same panel, UPS's air freight director for the Europe region Marco Tafuro says he has "a similar view" to Ozen's.

"For sure we expect some of the challenges to continue, at least for the first half of 2024, but we want to remain positive," he says, citing expectations of some demand growth "towards the end of 2024".

Tafuro adds, however: "Unfortunately, we were positive at the beginning of this year [regarding] a bit of improvement in the second half that didn't materialise."

Indeed, Brussels Airports' director of cargo Geet Aerts acknowledges that "I think we all had our hopes up" for 2023 but were left disappointed.

And with geopolitical tensions rising – most recently in the Middle East – Aerts is reluctant to predict anything but "neutrality" in 2024 when it comes to demand trends.

The geopolitical situation weighs heavily on the sentiment at Challenge Group, too.

In 2024 in terms of the global economy and all the geopolitical situations, unfortunately, it will not change and hopefully it will not escalate more, but the signs are not that good," says the air cargo group's chief executive Yossi Shoukroun.

Hong Kong Air Cargo Terminals chief executive Wilson Kwong meanwhile predicts "a lot of volatility, judging by all the events which are happening right now".

"But I think next year we'll see a small growth compared to this year," he says of demand.

All told, there was a strong sense at the summit that the air cargo sector is experiencing a rendezvous with reality after its Covid-era highs.

REBALANCING IN 2023

Photo by Jerry Zhang on Unsplash

By Jay Mesinger, CEO and founder of Mesinger Jet Sales

Sometimes change - especially sky-is-falling events - can be overwhelming. History can remind us of a few of these, including the 2001 dot-com bubble burst, the Great Recession in 2008, and the 2015 unspoken recession due to the oil price collapse and other global economic factors.

Some dramatic change, of course, is good, and this year will go down as the one when the industry's balance shifted. That shift should bring harmony, reality, normalisation, and growth to us all.

Starting in March 2020, we all got caught off guard by the pandemic. Ultimately, the business aircraft market grew with an unprecedented surge of first-time buyers entering the fray.

Huge numbers of entrants brought demand that stretched all segments of the business aviation industry. The search for hangar space was frenzied, pilot training slots had lead times never seen before, and maintenance pre-buy and modernisation slots were all but gone.

And let's not forget the dwindling preowned business aircraft inventory. Prices skyrocketed.

Supply-chain issues caused us all to wring our hands and shake our heads. What a mess.

Charter demand went through the roof, and it became next to impossible for some providers to deliver good service.

So, with this rebalancing in 2023, there will be some bystanders who will not survive, consolidation of some providers, and adjustments from operators and customers.

But we are a strong industry that was built to withstand many adversities - even when they occur all at once.

In fact, there are so many positive events taking place that it's clear our industry will not only survive but thrive. For example, more owners are proactively looking at fleet shifts and transitions, which is allowing new inventory to come to market; more preowned inventory allows for more choices for buyers; and more choices will allow for easing in prices.

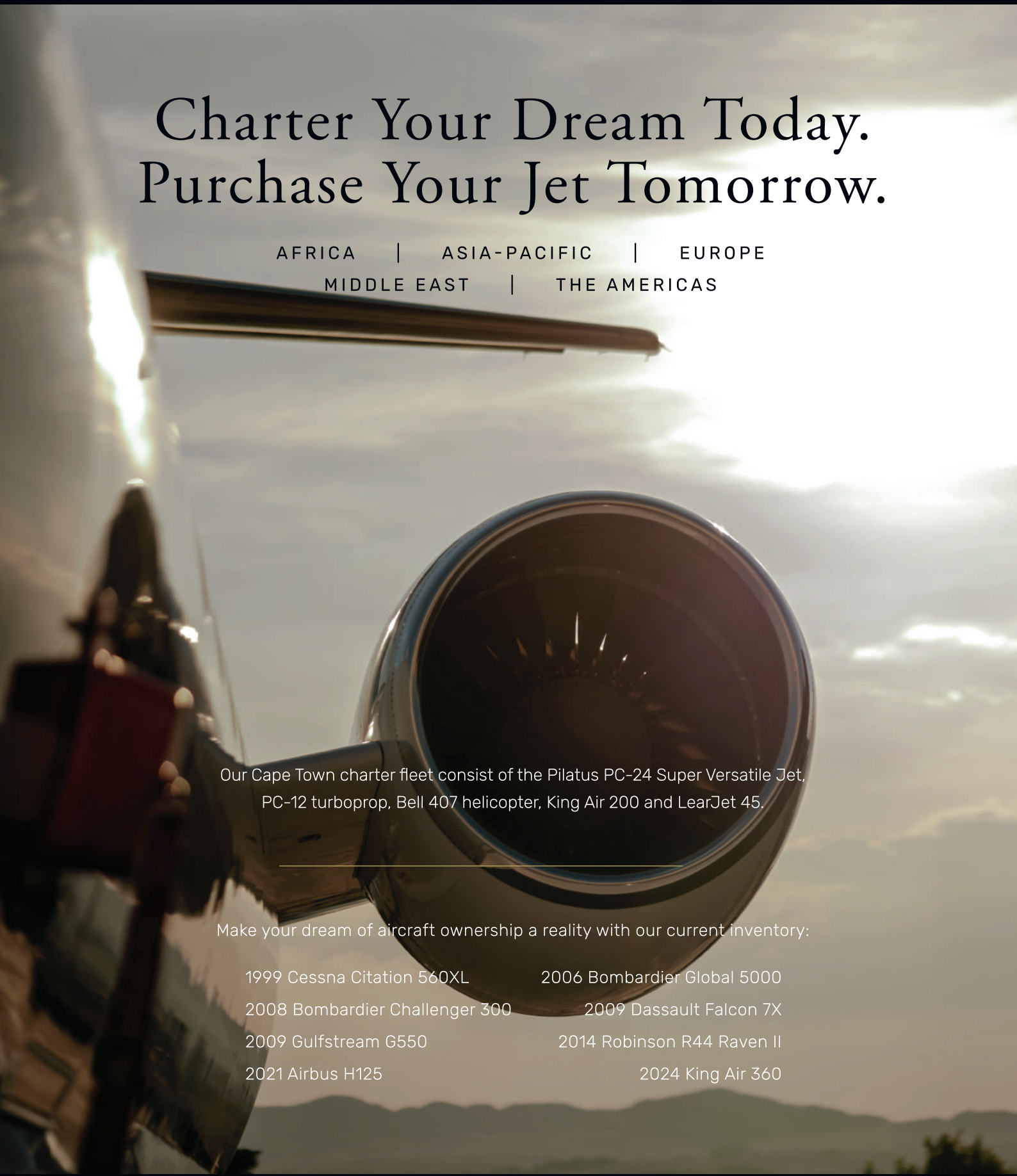
All this will make more prospects feel safer about entering the world of aircraft ownership. Do not get me wrong, I am not considering this price easing to disrupt the value calculation of aircraft - it will simply ease the frenzy.

This easing will also allow sellers to be more cognisant of the expectation of the buyer and, therefore, play a nicer sandbox game. Also, the natural result of greater inventory is longer days on the market. This should not scare sellers, just create a more natural process. This more natural process levels the playing field and puts the balance back in our steps.

So, welcome to a time of change that is finally created by all the right events.

No catastrophic occurrences will stop dead in the tracks the industry and players that have for so many years come to welcome and enjoy the act of buying, selling, operating, and reselling the equipment that flies us safely and efficiently around the world. Enjoy!

Who is Jay Mesinger?
Jay Mesinger is the CEO and founder of Mesinger Jet Sales, an international aircraft brokerage firm. With 49 years of successfully buying and selling aircraft, Mesinger Jet Sales has a global reputation for personalised, transparent service.



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