

ISSUE 4, VOLUME 16: NOVEMBER 2024 – JANUARY 2025



ARABIAN AEROSPACE

THE MAGAZINE FOR AEROSPACE PROFESSIONALS IN THE MIDDLE EAST, NORTH AFRICA AND TURKEY

www.timesaerospace.aero



MAROC SOLID

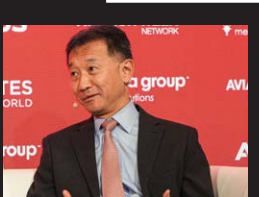
**CEO ADDOU
CONFIDENT IN
RAM'S FLEET
EXPANSION**

PAGE 9

AIR TRANSPORT

Gulf Air key
to Bahrain's
aviation
ecosystem

PAGE 15



DEFENCE

Qatar Emiri
Air Force
celebrates
50 years

PAGE 26



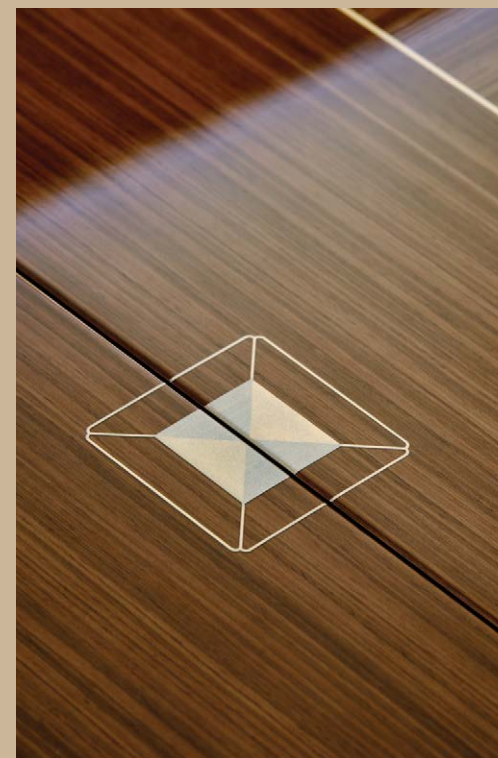
EVENTS

The role
of AI in
flight
safety

PAGE 40



AVIATION WEEK
NETWORK



THE PERFECT PLACE

FOR BUSINESS AIRCRAFT

AUCH • LONDON • BASEL • ZURICH • ISTANBUL • BODRUM • BEIRUT • RIYADH

AMAC AEROSPACE

www.amacaerospace.com

Frequentis OneATM REMOTE DIGITAL TOWER



Rethinking airport operations with Frequentis Remote Tower

Frequentis' Remote Digital Tower is transforming air traffic control by enabling seamless, remote airport management. Its scalable design allows a single team to manage one or multiple airports, enhancing operational flexibility and efficiency. Used as a primary tower replacement or a contingency solution, this technology ensures safety and compliance with top industry standards. Trusted by airports worldwide, Frequentis' solution empowers airports to handle fluctuating traffic demands with ease, future-proofing operations in today's dynamic aviation environment.



www.frequentis.com/OneATM

Published by
TA TIMES
AEROSPACE

Part of
AVIATION WEEK
NETWORK

Times Aerospace Publishing Ltd
3-4 Rumsey House
Locks Hill, Rochford
Essex, SS4 1BB, UK
Tel: +44 (0)1702 53 0000
Fax: +44 (0)1702 53 3088

Website: www.timesaerospace.aero

Publisher:
Mark Brown
Mark.brown@aviationweek.com

Display Advertising:
Grant Lee
Grant.Lee@aviationweek.com

Circulation Dept:
Abi Ahrens
Abi.Ahrens@aviationweek.com

Editorial
news@timesaerospace.aero

Editor-in-chief:
Alan Peaford

Deputy Editor:
Marcelle Nethersole
ella@aerocomm.aero

Managing Editor: Mark Pilling

Editorial head office:
Aerocomm Ltd,
Norths, Rectory Road, Orsett, Essex
RM16 3JU UK.

COVER:
Royal Air Maroc CEO,
Abdelhamid Addou.
PICTURE: RAM

Advertisers

Airbus	13
AJW Group	33
AMAC Aerospace	IFC, 1
Aviation Week Network	14, 31
Bahrain International Airshow	28, 29
CFM International	4
DC Aviation Al-Futtaim	46, 47
Embraer Commercial	21
Frequentis	2
GE Aerospace	OBC
Jewellers Doors Limited	35
JORAMCO	19
MEBAA 2024	25
ND Technologies	IBC
Rolls-Royce	10, 11, 17
Satcom Direct	7
SKYPLAN	23
TP Aerospace	37

ARABIAN AEROSPACE
magazine is a proud
"Industry Partner" of:



ARABIAN AEROSPACE
magazine is officially
supported by:



CAN BAHRAIN CREATE A SUSTAINABLE AIR TRANSPORT SYSTEM?

The beginnings of Bahrain as an international destination of note dates back to 1927, when the Kingdom's first charter flight landed.

Fast forward nearly a century and this small island state has a shiny new airport, completed in 2021, that is an oasis of calm in comparison to the teeming gulf hubs of Dubai and Doha.

Bahrain International Airport is calm simply because it has nothing like the traffic flows seen in the UAE and Qatar. But do not confuse calm with irrelevant, for while the state of Bahrain will not claim to match the mega-Gulf hubs in passenger numbers or cargo volumes, it does want decent connectivity to the world around and an aviation infrastructure to deliver it.

But at what cost? Can this country create, and critically sustain, an airline, airport and surrounding aviation system that taxpayers do not subsidise? Most Middle East states, except for the economic powerhouses of the UAE and Saudi Arabia, have the same conundrum.

History says this is an elusive task. States have for years, especially for their flag carriers, poured millions into this endeavour with little success.

Bahrain's solution is to bring all the actors under one roof – the Gulf Air Group – with business and strategic alignment under a single management team and structure. The government wants its aviation assets to support the Kingdom's economic vision, launched as long ago as 2008, to deliver a thriving and sustainable country.

And it wants the air transport players to do this without

drawing on the public purse. In many countries, getting government out of the way and letting economic reality decide if businesses thrive or fail is the best way of achieving this goal.

That is not an option in Bahrain, so government must show leadership and dictate direction. Restraint will be key to Bahrain's success.

All too often, restructuring plans of airlines in the region have shown early promise, with capacity discipline and modest expansion, quickly derailed as the lure of new aircraft, more routes and fancy onboard products proved too great.

□□□□□

It is striking to hear new Gulf Air Group CEO Jeffrey Goh talk about a "calibrated and disciplined ambition" for the airline's growth. Goh and Bahrain's aviation leaders are said to desire the same thing – connect the Kingdom and positively contribute to its prosperity.

If Bahrain can stick to its vision, it has a generational chance to establish a sustainable air transport ecosystem. For sustainable read break even most likely at best at a balance sheet level, but that would prove a significant victory and improvement on past efforts.

So good luck to Bahrain, home to the Middle East's first international carrier, which celebrates its 75th birthday in 2025 – you could be a model for others to follow. The message: keep to the plan.

Mark Pilling, Managing Editor



05 Business brief: Regional round-up.

AIR TRANSPORT

09 COVER STORY:

Bedtime story: What doesn't keep Royal Air Maroc CEO, Abdelhamid Addou, awake at night...

15 Gulf swing: Gulf Air's network will see some unprofitable routes culled and a range of newer services added.

18 Beond's wildest dream: New airline reaches for the business-class sky.

20 Fleet afoot: Oman's SalamAir shapes up for the future.

22 Sphinx ahead: Next Steps for Egypt's aviation plans.

BUSINESS AVIATION

24 Managing expectation: ASM expands its operation in the Middle East and Africa.

DEFENCE

26 Golden moments: Qatar's QEAF celebrates its 50th Anniversary.

30 Show of force: A few surprises at the Egyptian air show.

AIRPORTS

32 Round-up: Riyadh master plan and optimising flight ops.

FINANCE

34 More lessors?: Huge prospects for aircraft leasing in the Middle East.

MRO

35 Bridging the Gulf: Gulf Air's expansion.

36 Round-up: UAE's clean energy drive and Sanad's engine deal.

38 Blockbuster: Does blockchain have a place in the Middle East's MRO industry?

SPACE

39 Star trek: Update on the UAE's asteroid mission.

FOCUS ON EVENTS

40 IATA review: AI's key role in the future of aerospace was a key focus at the IATA World Safety and Operations Conference (WOSC) held in Marrakech.

42 Egypt's showcase: Highlights from the world's newest airshow – which hopes to become a regular fixture.

44 Looking good: Bahrain International Airshow promises 'new look and feel'.

45 Big time: MEBAA Show will be bigger and better than ever.

PEOPLE

48 All in a day: Peter Landquist, CTT Systems.





LEAP

LEAP turns heads in the boardroom.

LEAP-powered aircraft are achieving the highest days flown ratio* for their thrust class. That means fewer spare aircraft and more flights, which helps profitability climb. Another reason to say LEAP. By example.

*Compared to 83% for competition, per third-party data.

92% asset availability

LEADERS AREN'T BORN. THEY'RE ENGINEERED.

cfmaeroengines.com



AACO secretary-general Abdul Wahab Teffaha (right) and Royal Jordanian CEO Samer Majali (left) present Akbar Al Baker with a memento marking his service to the region's aviation sector.

IMAGE: AACO

AACO CALLS FOR SAF PATH FOR ARAB AIRLINES

Arab airlines have called on countries to encourage the take-up of sustainable aviation fuels (SAFs) through incentives, rather than through financial penalties.

Incentives to create and purchase more SAFs, not punishment for failing to meet national SAF mandates, is the way in which to encourage the greater use of low-carbon fuels, Arab Air Carriers Organization (AACO) secretary-general Abdul Wahab Teffaha told the body's annual meeting, held beside the Dead Sea in Jordan on October 30.

Several speakers singled out European nations as being quick to threaten the aviation sector with financial punishment, when they themselves were failing to help reduce aviation-related emissions.

Samer Majali, the annual meeting's chairman and CEO of Royal Jordanian, pointed out the failure to make progress with the Single European Sky (SES) project, which is designed to make European air traffic control more efficient by allowing fewer air traffic control centres to take responsibility for airspace encompassing the borders of several nations.

This has made little progress over the past 20 years, due to a combination of countries objecting to loss of sovereignty over their airspace, controllers' trade unions' fear of job losses and a lack of willpower on the part of politicians to force the project through.

A functioning SES could reduce Europe's aviation emissions by 10% - a significant drop - but it shows little sign of being put into action.

"The Europeans are driving this environmental stuff, yet they have in their hands the ability to do things that they are not doing," said Majali. Instead, he noted, they were turning to financial measures.

Taxes or financial penalties would be passed on to airlines and eventually filter through to higher ticket prices.

The meeting of the 37-strong airline body was taking place in the shadow of the conflict that has engulfed Palestinian and Lebanese communities. The conflict, which has led to airspace closures, flight diversions and a significant drop in inbound tourists - particularly to Jordan - has now continued for more than a year.

The opening ceremony included a tribute to Akbar Al Baker, long-time Group CEO of Qatar Airways, who steered the airline to become one of the most successful in the world. He is now advisor to Qatar's prime minister and foreign minister.

Among the plaudits, Saudia's director-general, and chairman of AACO's executive committee, Ibrahim A. Al-Omar, said: "I would like to express, on behalf of the members of the executive committee and in my own name, our heartfelt thanks and appreciation to our dear brother, Akbar Al-Baker, for his contributions throughout his career, which have had a significant impact on the development of the aviation sector."

Raytheon upgrades

Raytheon, an RTX business, has been awarded a major reconnaissance system upgrade contract for an air force customer in the Middle East region.

This is the 12th nation in the Middle East and North Africa region to use Raytheon's advanced multi-spectral reconnaissance pods.

The award, which will be contracted via U.S. foreign military sales (FMS) channels, involves upgrading existing DB-110 electric optic/infra red pods designed for fast jet operations, including Boeing F-15 and Lockheed Martin F16, to the advanced MS-110 configuration and providing improved ground station exploitation features associated with the SCI-toolset suite of software tools.

Tomorrow's world

Turkish Airlines has launched its sustainability brand "Tomorrow On-Board."

The carrier said the sustainability brand represents the scope of its future goals and aims to present this comprehensive vision to passengers and investors as part of the corporate culture.

Chief investment officer of Turkish Airlines, Levent Konukcu, said: "This initiative embodies our commitment to reducing our environmental impact and enhancing sustainability practices across all our operations to leave a better world for future generations."

Pegasus seats

Acro Aircraft Seating has won a contract with Pegasus to line-fit 50 Airbus A321neo aircraft. Deliveries to the low-cost Turkish carrier will start in the first quarter of 2025, with the inaugural order completed by the end of 2029, and the potential for 50 further aircraft to follow soon after.

Airline partnership

Riyadh Air and Singapore Airlines have signed an MoU to establish a new partnership between the two airlines. The carriers will explore opportunities for interline connectivity on each other's services, subject to regulatory approval. They will also work on other potential areas of commercial cooperation.

Saudi ecosystem

Embraer is to help with the development of an aerospace ecosystem in Saudi Arabia, along with the Kingdom of Saudi Arabia's National Industrial Development Center (NIDC), AHQ Group. The agreement focuses on the adoption of Embraer aircraft by the Kingdom of Saudi Arabia as well as on potential technological cooperation, supply chain and human capital development between the organisations to achieve excellence in products and services, evaluate industrial capabilities and new business opportunities.

Qatar/UN support

Qatar Airways and the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) have signed an MoU to help support humanitarian endeavours.

Qatar Airways group CEO, Badr Mohammed Al-Meer, said: "Our cargo division is set to provide transportation of aid and emergency materials to our network of more than 170 destinations and 70 freighter destinations. Qatar Airways continues to commit to fulfilling its humanitarian role through collaboration and advocacy through the coming years."



Emirates to debut newly-retrofitted Boeing 777s

The Emirates Boeing 777s entered refurbishment in early July, and so far, six aircraft have fully rolled out into service, flying to Geneva, Zurich, Brussels, Haneda (Tokyo) and Riyadh. The four-class configuration features 24 premium economy seats set in a 2-4-2 abreast layout. The 19.5-inch-wide cream leather seats consist of a 38-inch pitch, reclining eight inches to stretch and relax, in addition to six-way adjustable headrests. The new economy class cabin features 256 ergonomically-designed seats in a colour palette of soft greys and blues.

The Emirates Boeing 777: Business Class will include a small bar for light snacks and refreshments. IMAGE: EMIRATES AIRLINES

Stop wastage

IATA is collaborating with the Aviation Sustainability Forum (ASF) to launch a standardised cabin waste composition audit (CWCA) platform to be launched in September 2024. CWCA audits have already been trialled in two waves, covering 25 flights (short, medium, and long-haul). ASF conducted the audits based on a methodology developed by IATA. Preliminary results indicate that the sector is generating more than 3.6 million metric tonnes of cabin and catering waste annually, with 65 per cent being food and beverage waste. Untouched meals account for 18 per cent of all waste.

Yahsat satellites

Yahsat, the UAE’s flagship satellite company, has contracted Airbus Defence and Space for its new geostationary telecomms satellites, Al Yah 4 (AY4) and Al Yah 5 (AY5). Airbus will design and build the AY4 and AY5 satellites based on the

Eurostar Neo platform. The flexible multi-band payloads can be fully reconfigured while in orbit, capable of adjusting the coverage area, capacity and frequency “on the fly” to meet evolving mission scenarios. Both AY4 and AY5 satellites will offer secure governmental communications over a wide geographical area across the Middle East, Africa, Europe and Asia.

RoSPA award

Bahrain International Airport (BIA) has been awarded with the Royal Society for the Prevention of Accidents (RoSPA) health and safety award for the fourth consecutive year. Bahrain Airport Company (BAC) CEO, Mohamed Yousif Al Binfalah said: “The award reflects the airport community commitment to safety and the diligent work our team members’ contributions to adhere to the best industry health and safety practices. At BAC, the safety of passengers and

staff is a top priority, and we strive to work with our partners to maintain the highest standards at the airport.”

Qatar Airways profit

Qatar Airways Group has reported the strongest financial performance in its 27-year history, announcing record profits of US\$1.7 billion for its 2023/24 financial year. The airline group reported historic net profits of US\$1.7 billion during the 2023/24 fiscal year, with a total revenue of US\$22.2 billion, representing an increase of US\$1.3 billion – up six per cent compared with last year.

RAM’s longest route

Royal Air Maroc (RAM) is to resume direct flights from Casablanca to São Paulo. This is the airline’s longest-planned non-stop route. The flights will commence from its hub at Casablanca Mohammed V International on December 7, 2024 and will be operated three times a week with the Boeing 787 Dreamliner.



Mikail Akbulut: “This agreement stands as a testament to our technical expertise in aircraft services.” IMAGE: TURKISH TECHNIC

Turkish Technic checks in with IndiGo’s Airbus A320neo

Turkish Technic and IndiGo have signed an agreement covering the redelivery checks of seven Airbus A320neos. Under this agreement, Turkish Technic will provide redelivery check services for Airbus A320neo aircraft at Turkish Technic facilities in Istanbul Atatürk Airport as well as Sabiha Gökçen Airport, with the first aircraft recently arrived. Mikail Akbulut, CEO and board member of Turkish Technic, said: “We are pleased to further expand our partnership with IndiGo. This agreement stands as a testament to our technical expertise in aircraft services. With years of experience under our belt, we are fully equipped to ensure the smooth and timely redelivery of IndiGo’s Airbus A320neo aircraft, contributing to their continued operational success. We look forward to strengthening our collaboration and exploring new opportunities with IndiGo.”

Take your world with you.



Beyond speed

At SD, we know speed is important, but we also know that consistency, reliability, and genuinely global coverage are what really count. Purpose-built for business aviation, our ground-breaking Plane Simple® antenna series supports productivity, entertainment, and relaxation on the ground or in the air. We deliver flexible pricing plans, 24/7/365 human customer support, cybersecurity services, and a single resource for your end-to-end connectivity needs from boarding to deplaning. SD, connecting you beyond all expectations.

IMAGE: EMIRATES AIRLINES



Emirates SkyCargo orders five more Boeing 777 Freighters

Emirates SkyCargo has ordered five more of the world’s largest and longest-range twin-engine freighter, building on its earlier purchase of five Boeing 777 freighters.

The latest order, which was finalised in September and listed as unidentified on Boeing’s orders and deliveries website, brings Emirates’ order book to 249 Boeing widebody aircraft, including 14 777 freighters.

Emirates SkyCargo plans to operate 21 777 Freighters in the coming years nearly doubling its current fleet of 11 freighters as the carrier continues to expand capacity.

“We’re investing in new freighter aircraft to meet surging demand and provide our customers around the world with even more flexibility, connectivity and options to leverage market opportunity,” said HH Sheikh Ahmed bin Saeed Al Maktoum, chairman, Emirates Airline and Group. “Demand for Emirates’ air cargo services has been booming. This reflects Dubai’s growing prominence as a preferred and trusted global logistics hub.”

Turkish A321neos

Turkish Airlines has signed a lease agreement with lessor AerCap for 10 new Airbus A321neos.

The airline is currently awaiting the delivery of 194 A321neos it has on order direct from Airbus.

“We are happy to further enhance our fleet with 10 new Airbus A321neo aircraft through our partnership with AerCap,” said Turkish Airlines chairman, Prof. Ahmet Bolat. “This addition aligns with our strategy to continue offering our passengers a modern and efficient travel experience while supporting our ongoing expansion plans for new routes and increasing the frequency of existing ones.”

Turkish 777F orders

Turkish Airlines has ordered four more Boeing 777 aircraft. The airline will now operate 12 777 freighters.

“This new investment in expanding our cargo fleet underscores our

commitment to meeting the growing global demand for air freight services,” said Turkish Airlines chief cargo officer Ali Türk. “The addition of these Boeing 777 Freighters will not only enhance our operational capabilities, but also serve as another step in our strategic vision to reach the top of air cargo sector worldwide while maintaining our leading position with our unparalleled service and efficiency for our customers across the globe.”

Dubai University Lab

A state-of-the-art laboratory will be established at the University of Dubai aiming to promote collaborative efforts and research in advanced air mobility (AAM).

EANAN Al Samma, a UAE-based technology company, signed a MoU with the University of Dubai (UD), Xi’an Jiaotong University (XJTU) and Zhuji SRJL Materials Laboratory to foster international cooperation in applied sciences and expand the dissemination

of academic and research information.

Dr Eesa M. Al Bastaki, president of the University of Dubai, said: “We are thrilled to be part of this key partnership as it plays a vital role in supporting the UAE’s ambitious goal to become a global leader in the air mobility and electric motors industry.”

Saudi AMS sector

Eve Air Mobility and Saudia Technic have signed an MoA to explore the potential demand of MRO activities for eVTOL aircraft in the region.

Fahd Cynndy, CEO of Saudia Technic, said: “This MoA is in perfect harmony with Saudi Vision 2030, as it aims to establish Saudia Technic and Eve as leaders in the air mobility sector (AMS) in Saudi Arabia and the broader Middle East. By adopting cutting-edge technologies and seamlessly incorporating them into their operations, they are defining a new benchmark for aviation excellence in the region.”



IMAGE: ETIHAD AIRWAYS

Paris welcomes return of Etihad’s A380

Etihad Airways has celebrated the return of its Airbus A380 on the route between Abu Dhabi and Paris-Charles-de-Gaulle, further expanding its offering for passengers between the United Arab Emirates and France.

On November 1, the iconic aircraft flew from Abu Dhabi into Paris Charles de Gaulle Airport, enhancing the travel experience between the two capitals.

The A380, known for the luxurious three-room suite “The Residence” and exclusive lounges for premium passengers, offers a 31 per cent increase in capacity on this route.

From January 2025, Etihad also plans to use a Boeing 787-9 Dreamliner, which will increase the weekly seat capacity to almost 5,000.

Sleepless in Morocco

While many challenges may keep Royal Air Maroc CEO, Abdelhamid Addou, awake at night, the airline’s ambitious fleet expansion is surprisingly not one of them. Chloë Greenbank takes a closer look.

By 2037, Royal Air Maroc (RAM) plans to grow its fleet from 50 to 200 aircraft, a key element of a government-backed initiative to develop Morocco’s national carrier. Alongside this, passenger numbers are projected to rise from eight million to 32 million during the same period, while the airline also aims to increase its destination network to 143 destinations (it currently serves around 60).

Addou, who was appointed CEO of the airline in 2016 is confident: “This growth is part of our core development strategy, built on solid market data, not just a vision,” he told *Arabian Aerospace* at this year’s International Air Transport Association (IATA) World Safety and Operations Conference (WSOC). The event, which was hosted by RAM, was held in Marrakech in October.

With its primary base, Mohammed V International Airport in Casablanca a key regional hub, Addou revealed his plans to capitalise on the airline’s geographical strength linking Europe with Africa.

“We are currently focused on connecting Africa to Europe as well as the Americas and leveraging our ‘open skies’ relationships with both the European Union and the US,” he said. Ultimately, the airline plans to add new long-haul services from Moroccan hubs other than Casablanca, including Marrakech and Rabat.

While Addou highlighted that RAM serves more cities between Africa and Europe than any other airline, he also alluded to plans to grow its presence on the Arabian market. “We are not trying to compete with the likes of Turkish Airlines, Emirates or Qatar in Asia as they already have a strong presence in that market. Our strength lies elsewhere but developing our network in the Middle East is key. We are close culturally,

Continued on Page 12

IMAGE: BILLYPIX



Find out more
#PowerOfTrent



TRENT 7000

KEEPING COOL UNDER PRESSURE

**Our Durability Enhancement package
is already delivering in all environments.**

Our new Durability Enhancement package for the Trent 7000 is well on its way to delivering more than double the time on wing in the Middle East.

At the heart of the package is a re-engineered High Pressure Turbine Blade incorporating the very latest in advanced blade cooling design.

This is already proving itself in service by enabling the highest engine efficiency and delivering improved durability for our customers.

CONTINUED FROM PAGE 9

Highlighting RAM’s relationship with Emirates, Addou referenced how the two airlines strengthened their collaboration in 2022, launching a code share partnership enabling their customers to access a much wider global network via their respective hubs in Casablanca and Dubai. “In addition to our great relationship with Emirates, we also have a strong partnership with Qatar on our Casablanca-Doha route,” he added. These strategic partnerships along with RAM’s membership of the OneWorld alliance – it was the first Africa-based carrier to join the group – are central to the airline’s growth both regionally and globally, enabling it to access a much wider network.

Addressing the impact of the current geopolitical unrest between Iran and Israel, Addou acknowledged “there is a great deal of uncertainty, so primarily we all hope that peace prevails in the region. Tel Aviv was an important route for us, but we had to suspend our daily flights there in October 2023. Likewise, our plans to serve Beirut are on hold due to the ongoing situation. In response, we’ve refocused on other destinations, including Abuja in Nigeria, Manchester in the UK, Naples in Italy, and São Paulo in Brazil. However, we remain agile and ready to adapt as conditions evolve.”

In line with its fleet expansion programme, the airline launched a request for proposals (RFP) to OEMs in April 2024. Aircraft choices are expected to be finalised by the end of the year, with plans to invest in both narrowbody and widebody aircraft, but keeping capacity below 330 seats, revealed Addou.

The airline’s current fleet is comprised of Boeing MAX 8s, 737-800s and 787-Dreamliners, as well as Embraer 190s and ATR72-600s. The latter are primarily operated by RAM Express, the airline’s regional subsidiary.

“Our fleet has served us well and we haven’t encountered some of the issues with our Boeing aircraft that other players have reported in terms of maintenance and reliability. However, as we continue to expand, the need for fleet diversification becomes increasingly important.”

To accommodate its passenger and aircraft growth RAM is also collaborating closely with the state-owned Moroccan Airports Authority (ONDA). Having opened a new transit zone dedicated to passengers on international layovers earlier this year, Casablanca as RAM’s

primary base, is now set to undergo a major transformation. ONDA has already launched a RFP for a new terminal to increase the airport’s capacity to 30 million passengers with the potential for further expansion to 50 million. According to Addou: “This huge transformation will see RAM move from a traditional connector (operating south-north) to a more dynamic, global connector.”

The airline is also actively collaborating with tourism authorities to expand its network. Addou’s professional background, which includes a stint at the helm of the Moroccan National Tourism Office (ONMT), has ingrained in him the importance of placing the customer at the core of all efforts.

He also emphasised that tourism plays a pivotal role in driving the airline’s growth and development.

“Our expansion plans include a new tourism focused app, which we hope to introduce in the coming months. The service will involve a dedicated narrowbody fleet providing point-to-

allocating up to 50 per cent of our operations to the African market while most of the remaining routes will focus on long-haul services. A smaller portion will be dedicated to point-to-point connectivity where we continue to face strong competition from LCCs.”

The airline, which has a four-star Skytrax rating, has also been enhancing its passenger experience through key initiatives in recent years, including the introduction of new uniforms, upgrading in-flight catering and refurbishing cabins to provide an authentic Moroccan experience. “We take our responsibility seriously to embody the best of Morocco, while maintaining a customer-centric approach.”

Addou also emphasised the importance of ancillary revenues for RAM, which have jumped from three-four per cent pre-Covid to around 35 per cent today. “Online services like ticket upgrades, seat selection and additional baggage options have been game changers for us.”

The airline has also launched a digital open innovation programme, engaging with start-ups to co-develop and implement pioneering solutions that include innovative retailing strategies and revenue optimisation.

As for what does keep Addou awake at night? “I haven’t slept for nine years now,” he said jokingly. “When you have so many aircraft flying over your head every day, that’s a huge responsibility. Safety and security are always top of my mind, as is passenger satisfaction.” The fluctuating price of oil is also a constant cause for concern. “We don’t produce oil in Morocco, so we are at the mercy of global markets,” he said explaining that balancing these constantly shifting costs isn’t easy.

Despite these challenges, Addou remains excited by the airline’s role in realising Morocco’s broader vision for the future and its contribution to the wider region’s progress. “The airline’s development is in line with the King’s vision to develop the country, for which tourism and transportation play a key role and which includes preparing for the 2030 FIFA World Cup.” Morocco is co-hosting the football tournament alongside Spain and Portugal.

“We have bold plans to develop quickly over the next decade, which will have an impact on our country, our population and the region. By 2030 I hope RAM will have fully taken off. Whether I’m still with the airline or not, I want to be there not just for the World Cup, but to see the results of all this hard work and the opportunities it will create.” ▲



point connectivity to major tourist hubs in Europe.” He also noted that while distinct from RAM’s main operations, this initiative will complement the airline’s strategic vision.

Acknowledging the intense competition it faces in Morocco, especially from low-cost carriers (LCCs), Addou emphasised that RAM’s core strength lies in its expansive African network.

“Since the open skies agreement with the EU in 2006, competition has increased significantly, particularly with LCCs including Flynas, flydubai, Ryanair and easyJet,” he noted. “In response, we focused on developing the African market where we now cover three quarters of the continent. Competing with fellow national carriers under similar conditions and with competitive fares has allowed us to strengthen our position and has made us more robust than ever.”

Looking ahead, Addou explained, “Over the next decade, we will maintain this structure,

GIVE THE FUTURE A POSITIVE OUTLOOK



We can’t leave the future to chance. That’s why we’re committed to giving it a positive outlook with our latest generation of aircraft. Comprised of the A220, A320neo, A330neo and A350, this versatile collection provides best-in-class cost of ownership, combined with exceptional reliability. Designed to reduce fuel burn by 25%, these aircraft also have a lower noise footprint. So passengers can benefit from a quieter, more comfortable experience, while together, we help ensure the world remains a beautiful place.

AIRBUS

Bahrain is determined to find a successful formula for its aviation ecosystem, with Gulf Air at the centre, to give strong connectivity for this island state. Jeffrey Goh, CEO of Gulf Air Group, talked to **Mark Pilling**.

It's green for Goh

Jeffrey Goh, the Gulf Air Group CEO, is finally ready to go public with his plans. It is two years since he was appointed to the post leading the Kingdom's unified air transport assets, and 10 months since he added the responsibility of leading Gulf Air, the group's airline, to his role.

"Typically, in my first year at any organisation I don't take the public stage. We need to get our house in order and then we have a story to tell," explained Goh, who arrived to lead Gulf Air Group from 16 years at the Star Alliance, the final six as its CEO.

Goh landed at Gulf Air at a critical time in its history as the Middle East's first commercial carrier prepares to celebrate its 75th anniversary in 2025.

From its glory days in the 1970s and 1980s, Gulf Air has struggled for over a decade to find a profitable and sustainable niche in an increasingly competitive region. CEOs have come and gone regularly, as have a parade of restructuring plans. None has worked.

The Bahraini Government is determined that this time it can discover a successful strategy so the state's aviation assets can deliver on its Economic Vision 2030, which includes promoting the Kingdom's tourism and its role as an important regional trading and logistics hub.

The first step was taken in October 2022 when His Royal Highness Prince Salman bin Hamad Al Khalifa, the crown prince and prime minister of Bahrain, decided to put all the country's aviation assets under one roof for the first time.

□ □ □ □ □

This saw Gulf Air, Bahrain Airport Company, and affiliates including the Gulf Aviation Academy and its MRO business come under the same management. The Gulf Air Group was established and more businesses will be added in time.

"I think it's a unique structure," said Goh, speaking in an interview at Routes World 2024, the airline-airport networking event that was hosted by Bahrain in October.

"We know in this industry how often the airlines and airports don't see eye to eye, but being together has allowed us to explore more seamless opportunities, whether the minimum connecting time or transfer processes," he outlined. This is important as transit traffic makes up about 70 per cent of Gulf Air's business and the airline represents around 70 per cent of Bahrain International Airport's operations.

Asked how far apart Gulf Air and Bahrain Airport were, Goh chose his words carefully. "As divergent as you can expect between an

“We spent a lot of time navel-gazing, and we have come up with two very clear strategic pillars for the airline. One is about connectivity and the other is about customer service excellence.”

JEFFREY GOH

Continued on Page 16 

Welcome to the family.

Aviation Week Network welcomes *Arabian Aerospace*, *African Aerospace* and *Show Business*. These esteemed brands enhance our global aviation, aerospace, and defense footprint across the Middle East, Africa, and South Asia.

Aviation Week Network is committed to growing our portfolio to support your needs wherever you do business.

AviationWeek.com | Timesaerospace.aero



CONTINUED FROM PAGE 15

airline and an airport, from disputes on car parking to charges. It's early days but we are on a good trajectory," he noted.

Having a single leader makes the group better placed as it drives towards two key missions, said Goh. "One is to become a positive contributor to the GDP of the kingdom, and the other is to increase the international brand of Bahrain and Gulf Air."

Talking about a desire to align is one thing, making it happen is another. Goh is drawing on the stakeholder management skills he honed at Star where he became adept at corralling the wishes of 26 airlines.

With Gulf Air representing about 75 per cent of the group's revenues, deciding on a strategy for the airline has been paramount. "We spent a lot of time navel-gazing, and we have come up with two very clear strategic pillars for the airline. One is about connectivity and the other is about customer service excellence," said Goh, with examples of the latter being free Wi-Fi on

board and the ability to order meals 24 hours in advance of a long-haul flight.

"There is no breaking science here, but it is how you execute [that matters]," he added. "We want a calibrated and disciplined ambition in terms of our growth."

"There is a slice of the pie for us to have," said Goh, referring to forecast growth in the Middle East region and whether a country of Bahrain's size should have a flag carrier at all.

□ □ □ □ □

Today Gulf Air serves 60 destinations and will add a quarter more over the coming five years. Recent additions include Shanghai and Guangzhou, Munich and Baghdad.

However, Gulf Air's network "recalibration" means "there are markets where we will withdraw because they no longer make sense," said Goh.

Subject to aircraft availability, Goh is bringing in a more rational structure to its long-haul network. "You will see in five years a very different network proposition [from Gulf Air]," he said.

"A key project that we've been working on for a while, together with all the relevant stakeholders – the Tourism Authority and the Ministry of Transportation – is to build connectivity between Bahrain and the rest of the world, and that is the primary focus of the group, particularly between the airline and the airport," said Goh.

This sees Gulf Air developing its network, plus the country inviting all other airlines to serve Bahrain, which has an Open Skies air services policy.

One of the airline's targets is to resume service to the USA, with approval for this being sought from the US authorities for a potential start in 2025.

MISSING LINKS IN THE SUPPLY CHAIN

One of Goh's major bugbears is aircraft unavailability, in common with many other carriers. "And I don't think that this situation is going to improve, at least for the next two-three years," he added.

Gulf Air is especially affected by issues with its fleet of 10 Rolls-Royce Trent-powered 10 Boeing 787-9s with two-three of them grounded at any one time.

The carrier has simplified its fleet down to the 787s for its widebody services and Airbus A320s for its narrowbody fleet. It has 32 A320s in operation with another six to be delivered in addition to a further two 787s in the next few years.

The airline does not need further narrowbodies, but it may need "a few more" widebodies, said Goh.

Managing manpower needs is another major challenge, with many leaving the industry in recent years, said Goh. "Given

that there is a talent war in the airline industry, we've got to make sure that we are able to develop and retain key talent."

Despite these challenges, the substantial task of melding the Gulf Air Group into one force, and the large and competitive airlines in the region it comes up against, Goh's initial view when he took the job that Bahrain can compete for its share of traffic growth has strengthened.

"Size isn't everything. Just because you have a large airport doesn't mean necessarily that it is the best experience," he said, pointing out that his personal best curb to gate time is seven minutes at Bahrain International Airport.

Asked about his ambition for Gulf Air in the coming 18 months or so, Goh has a clear vision. "By the end of 2025 the message will be out there of the seriousness of our network, and we will have redefined our

customer service proposition on the ground and on board, including our loyalty proposition," he said.

"From an airline perspective, we want to address the financial performance very robustly," he explained.

"The group has very significant targets – revenue and cost. Bottom line, the target is the airline needs to be better than where it is today," said Goh.

The group CEO would not be drawn into predicting when Gulf Air could make a welcome return to the black, but he finished by noting that new airline CEOs typically have a three-year lifespan on a turnaround mission.

That would put break even in 2027 at the earliest. This is well past the carrier's 75th birthday, but if Goh and Gulf Air's owners keep strong to their disciplined approach they might succeed where plenty have failed.

Making our best, better

Our entire Trent engine family draws on decades of experience to be the most successful aero engine family ever, building on countless innovations to revolutionise the way we connect around the globe and fast-tracking the journey to sustainable flight.

"If you add up all the incremental benefits we bring to our Trent engines through continued innovation, they make up a substantial difference," explains Rory Clarkson, Engineering Associate Fellow – Engine Environmental Protection at Rolls-Royce.

In 2024, we announced a £1 billion multi-year investment in further engine improvements, some of which will help to double the time on wing for the toughest environments for our Trent XWB-97, as well as generating a 50% improvement in benign environments.

Now better durability, even in the toughest environments

The Trent XWB-97 is our highest thrust Trent engine, making it our hottest too. For engineers, this spurred research into how to keep our engines cool and operational in the hot and harsh environments of the Middle East – a popular route for customers. The build-up of desert sand, or mineral dust, is a common problem for engines operating in these regions. Densest at altitudes of up to 15,000 to 20,000 feet, most of the damage is caused during take-off and climb, when the engine is at its hottest.

"During these flight phases, dust gets drawn into the engine core, broken up into smaller pieces and eventually melts onto the hot turbine blades," explains Rory. "This molten rock, described as Calcium Magnesium Alumino Silicate or CMAS, can seep between the material components of the turbine blades as they expand and contract in the changing temperatures. Over time, this breaks down the turbine blade thermal barrier – meaning more frequent servicing and downtime for the aircraft."

At Rolls-Royce, we've developed and tested an innovative new coating that increases the lifetime of these thermal barriers and extends time on wing by up to 30%. "The coating is made up of a gadolinium zirconate which interacts with the CMAS to increase its viscosity, so it doesn't penetrate the material in the same way."

Testing a solution tailored to our customers' needs

Developing a coating this protective meant understanding the workings of the CMAS itself and how its chemical make-up changed as it travelled through an engine. Together with geologists and professors from the University of Manchester, our teams created a dust that would help simulate the conditions of the Middle East.



The testing process involved various stages of monitoring the impact of the CMAS on hot materials of up to 1,400 degrees Celsius, then as the materials increased and decreased in temperature, and eventually as a full engine test at our Testbed 80 facility in Derby. "We ran what we call rainbow tests, applying different standards of the coating to the 64 turbine blades to assess the comparative results," explains Rory. "We were able to look at the structure of the blades in detail to give us the confidence to then deliver this as a product."

Keeping operators in the Middle East flying for longer

Through our vast aerospace heritage and experience, as well as through the substantial data gathered through our advanced engine health monitoring systems, we've built a deep understanding of the full lifecycle behaviour of our engines, meaning we can pass on that confidence to airlines.

For our customers operating in regions like the Middle East, investments like these will deliver the long-term benefit of reducing servicing and overhauls, keeping them flying more reliably for longer.

Our innovative CMAS coating is already going into service for airline customers. Alongside these improvements, our £1 billion investment will continue to deliver a Durability Enhancement package for Trent 1000 and Trent 7000, alongside a fuel burn enhancement package for the Trent XWB-84, doubling durability for some engines, increasing time on wing across the portfolio and ensuring Trent engines remain the most efficient in the market.



Grounded: Two or three Boeing 787-9s are out of action at any one time.
IMAGE: GULF AIR

Can a tiny Maldives-based airline take on the industry's 'big boys' and survive? **Alan Dron** investigates.

BEOND'S BELIEF...

It's a daring concept: airliners outfitted with an all-business class interior, operating from a remote (if desirable) location, and going up against some of the world's best airlines. Daring? Some might call it foolhardy. But beOnd Airlines believes it has a formula that can work.

Although the airline's head office is in Dubai, its operational hub is Malé, capital of the Maldives. The Indian Ocean archipelago has long been an upmarket holiday destination, much favoured by honeymooners and wealthy couples. For that reason, many European, Middle East and Asian carriers fly there.

The airline has been financed by a combination of traditional investors and – particularly – private family offices. Additionally, around the time this issue of *Arabian Aerospace* appears, a round of fundraising will hopefully have raised between \$23 to \$30 million in additional funds.

□□□□□

That funding will be needed if beOnd is to reach its target of reaching a fleet of 32 aircraft in the next three to four years. This may sound ambitious, but “the market is there,” insists CEO Tero Taskila.

Perhaps unsurprisingly, given the current global shortage of new and used airliners “The biggest problem is ‘Do we have access to that number of aircraft?’ We’re certainly campaigning for those. We believe we’re in a position next year to introduce six aircraft and grow at six to eight aircraft a year.”

Malé's Velana International Airport “is quite constrained for parking, but that will change. A new terminal is likely to open by the end of this year and there are further developments to be done at the airport by the time we reach 32 aircraft.”

▼ Being a premium carrier, it's more about building trust first. ▲

TERO TASKILA

IMAGES: BEOND AIRLINES



However, not all beOnd's planned fleet may be based there. Taskila said that the airline's business model has been designed to be scaleable, with the company potentially setting up Maldives-type luxury leisure airline operations in other countries.

The company's initial services, launched in November 2023, were to Munich, Zurich and Riyadh. Kuwait, Jeddah and Bangkok are all either already in the pipeline for services, or are being closely studied. Asia, especially China, is a future target. Every new aircraft joining the fleet is likely to lead to two or three new destinations being added to the route map, with Asia the top priority, followed by the MENA region.

The carrier's initial fleet consists of a 44-seat Airbus A319 and a 68-seat Airbus A321; both are working well, Taskila said, with charter requests flowing in. With a global shortage of narrowbody aircraft: “We are trying to take any aircraft we can get our hands on.” For the future, the company is looking at both A321neoLR (long range) and A321XLR (extra long range).

□□□□□

The company is in discussions over the XLR's performance – it has a 4,700nm/8,700km range – but is looking carefully at whether the price premium it commands over the A321neoLR is too large when compared to the latter's range of 4,000nm/7,400km.

One possibility would be to take an A320 ACJ (Airbus Corporate Jet), “which typically is not of interest to traditional carriers, but would actually fit for us.” If beOnd went down this route, it would outfit the large business jet with 56 seats. Interestingly, the ACJ's range (4,950nm/9,160km) is even greater than that of the A321XLR, but the business jet version is less expensive.

As a start-up airline with a niche market, initial load factors have naturally been low (typically around 30 per cent), but these are now moving towards the 50 per cent mark: “The average has been growing all the time, so we're now in healthy numbers.

“Being a premium carrier, it's more about building trust first. It's not a low-cost model where people take a risk and say ‘It's only €21 [\$25]’ if the airline fails.”

Although beOnd is a scheduled operation, it is receiving “a lot of interest from the charter market”.

“We foresee that we will allocate some aircraft time to specialist charters like football teams.” “Round-the-world” charters are another niche market, with several booked in for 2025/26. ▲

JORAMCO | Committed to Excellence
A DBB COMPANY

We are Expanding!



Hangar 7 soon



www.joramco.com.jo

📍 Queen Alia International Airport - Jordan





SalamAir plans to increase its fleet of Airbus A321neos in the coming years.
IMAGE: SALAMAIR

SalamAir sharpens its cutting edge

A major change of direction is under way at Omani carrier SalamAir, as it seeks to restore its low-cost credentials. Alan Dron investigates.

A new CEO is in place and a renewed focus on the principles behind a successful low-cost carrier (LCC) is under way at SalamAir, as it slims down and shapes up for the future.

The Muscat-based airline is in the process of shedding several components that had led it into unfamiliar territory. The airline has been built around the Airbus A320 family, but the previous management bought widebody Airbus A330-300s, small narrowbody Embraer E195 E2s and a dedicated freighter.

"Name an LCC that has A330s," commented new CEO Adrian Hamilton-Manns, who took over the reins in early summer.

The move away from an LCC model had led to ticket prices that were in some cases even higher than those of the country's full-service carrier, Oman Air, he said. This had led Oman's civil aviation regulator to suggest it would tender for a new LCC, which Hamilton-Manns described as "a veiled threat" towards SalamAir – a warning that it was not fulfilling its original function.

□□□□□

As a result, the deal for four leased A330s has been cancelled, delivery of the Embraers has been deferred and the single A321 freighter has been grounded.

Additionally, a wheels and brakes workshop is being phased out and the company's whole engineering function is being reviewed to work out what is actually required to support SalamAir's fleet.

"It's all about cutting off all the areas that distract us and lose us money, areas an LCC shouldn't have," said Hamilton-Manns.

SalamAir is owned 50 per cent by the Omani government, through various institutions, and 50 per cent by private investors. "They want to grow the airline and put it back into the correct position as a low-cost carrier (LCC)."

The company has a fleet of 13 aircraft – six Airbus A320neo and seven A321neo – and should receive two more A321neo in 2025. At present, the company's business plan to

grow to 25 aircraft is being evaluated. The aim is to increase the fleet by two or three aircraft a year from 2026-2028.

As at most airlines, the Airbuses' Pratt & Whitney GTF power plants have proved problematical. The Embraers that have now been deferred use a different model of the same engine family and this was a reason for postponing their arrival. "We're not willing to take another piece of equipment that puts more pressure on us," the CEO said. The airline has not yet committed to a date to accept the small narrowbodies.

□□□□□

Indeed, Embraer Commercial Aircraft's president and CEO, Arjen Meijer, said in London in September that while the engine was now performing very well in benign environments, it was recommending to clients in harsh or dusty climates that they should postpone deliveries until Pratt & Whitney signed off on a new combustor – expected in late 2026 or early 2027.

If the Embraers eventually enter service, they are likely to be used mainly on domestic routes, including desert strips that are too small for the A320neos.

In terms of future route development, the Indian sub-continent is an obvious target. The airline already operates to seven destinations in India, six in Pakistan and two in Bangladesh, and expects to add to that list: "There's almost unending demand for travel to and from the sub-continent."

SalamAir is also looking closely at Africa, with the intention of launching five new routes imminently: "Kigali [in Rwanda] and the central part of East Africa keep showing up on our radar as heat pockets of opportunity," he said.

There are also plans to increase co-operation with Oman Air. Relations between the two carriers had become fractious under the previous managements of both airlines, but Hamilton-Manns, a New Zealander, has good relations with the flag-carrier's new Australian CEO, Con Korfiatis. The aim is to have a co-operation agreement similar to that between Emirates and Flydubai. ▲



Accelerate [Efficiency] Opportunity

E2 A new automatic take-off system and increased range up to 3000nm. An extra row of seats in the cabin generating extra revenue. Engine enhancements improving time on wing. E2 upgrades that take operational efficiency to the next level and accelerate opportunity for airlines.

#AccelerateOpportunity

 EMBRAER

Egypt's Minister of Civil Aviation, Sameh El-Hefny talks to **Alan Dron** about the country's soaring ambition to expand the aviation infrastructure and attract global tourism.

AIRPORTS BOOST ENERGISES EGYPT'S GRAND PLAN



Sameh El-Hefny: "The ambitious target of increasing overall airport capacity to 72.2 million passengers annually by 2025, from 66.27 million in 2023, demonstrates the country's unwavering commitment to growth and development in the aviation sector."

assess its operations and welcomed the launch of services by Saudi Arabian low-cost carrier flynas. The airport's strategic location and development efforts are positioning it as a key gateway for international travellers.

Egypt's aviation industry is experiencing a remarkable surge, driven by strategic expansion plans and a focus on enhancing connectivity. "The ambitious target of increasing overall airport capacity to 72.2 million passengers annually by 2025, from 66.27 million in 2023, demonstrates the country's unwavering commitment to growth and development in the aviation sector," said El-Hefny.

Egypt is spearheading efforts to enhance regional air traffic efficiency and connectivity. By exploring the integration of neighbouring Flight Information Regions (FIRs), including South Sudan, Saudi Arabia, and Jordan, Egypt aims to streamline operations and optimise airspace utilisation



Egypt, a pioneer in Middle Eastern aviation, is aggressively pursuing ambitious expansion plans for its airport infrastructure and airlines.

Minister of Civil Aviation, Sameh El-Hefny, said the government has unwavering commitment to attracting more tourists and aviation traffic to Egypt.

He emphasised the strategic importance of encouraging tour operators and private airlines to significantly increase their airline seats, underscoring the potential for substantial growth in the sector. With 14 existing airlines, Egypt is actively incentivising further expansion within the region.

To accommodate this anticipated growth, Egypt is investing heavily in modernising and expanding its airport infrastructure. The government's plans include:

- Alexandria's Borg El Arab Airport: Expanding capacity from 1.2 million to 6 million passengers annually through the addition of a second terminal.
- Sphinx International Airport: Transforming this airport into a regional hub for day trips from Red Sea resorts, attracting tourists with its proximity to the Pyramids and the Grand Egyptian Museum. The airport has already doubled its hourly passenger capacity to 900.
- El Alamein Airport: Expanding capacity to 400 passengers per hour to cater to the growing tourism demand in this emerging destination.

Minister El-Hefny recently visited El Alamein Airport to

TOURIST HUB: The Sphinx International Airport has already doubled its hourly passenger capacity to 900. PICTURES: EGYPTAIR

Egypt's commitment to expanding its aviation footprint in Africa is evident. "The country has witnessed a surge in traffic between its airports and other African destinations, with EgyptAir serving 26 destinations across 21 African countries," El-Hefny stated. "The airline's ambitious expansion plans target reaching 32 airports in 30 African countries by 2028."

EgyptAir's strategic expansion into Africa aligns with the government's broader vision. The national carrier's hybrid subsidiary, Air Cairo, is poised to play a pivotal role in penetrating deeper into African markets, offering flexibility and tailored services.

Egypt's rich aviation heritage and expertise extend beyond domestic operations. The government is actively seeking to collaborate with African countries in various fields, including training and knowledge sharing.

"The Egypt International Airshow, which took place in September, serves as a catalyst for the aviation industry, attracting global participants and fostering innovation," El-Hefny explained. "As El Alamein emerges as a prominent tourist destination, the government is considering rebranding the event to the El Alamein Airshow, further elevating its profile and promoting the region's tourism appeal."

WHERE PLANS COME TOGETHER

Since 1983, Skyplan has been the trusted navigator for countless flights, offering an innovative, web-based flight planning system that guarantees precision and efficiency. Tailored for private operators, corporate flight departments, and the aircraft management companies, our platform streamlines operations while enhancing reliability.

We deliver round-the-clock operational support, managing everything from overflight permissions to ground handling. Our bespoke flight operations training and consultancy services empower your team to reach new heights.

We'd love to chat with you about how we can make your operations smoother and more efficient. Stop by booth # 275 at the MEBA show and meet our team. We're excited to share live demos and show you firsthand the simplicity and reliability we bring to flight planning.



Let's elevate your aviation experience together—because at Skyplan, it's all about bringing your plans to life.

WWW.SKYPLAN.COM

MEBA SHOW MEET US AT BOOTH# 275



The Dubai-based company, Aviation Services Management (ASM), is set to open a new office in Saudi Arabia, enabling it to expand its aviation services in the Middle East. The company is also spreading its wings to Africa. **Kaleyesus Bekele** spoke to CEO and founder Vito Gomes.

Vito's vital statistics

ASM was established in the British Virgin Islands in 1998, initially offering consultancy services for aviation companies. The Dubai office was opened in 2004 to cater to the needs of airlines, corporate jets, and private operators.

Based in Dubai, ASM has been serving the commercial and business aviation industry for 25 years. It provides comprehensive trip support services worldwide, such as 24/7 aviation fuelling, ground handling, permits and navigation, route planning, flight tracking and supervision, and flight diversion management.

ASM also owns a fleet of Learjet 60XRs and provides VIP and Medevac charter services. In September 2023, the company received its AOC to operate in the UAE, making it the only company in the region to provide both in-house flight support services and aircraft management services. Currently, the company operates two 60XRs and is in the process of acquiring a Challenger 605 aircraft.

According to Vito Gomes, CEO and founder of ASM, his company provides ground handling, aircraft fuelling, flight planning, and other ground services such as hotel arrangements. "We ventured further into charter flights. We purchased aircraft to provide air ambulance services to different destinations, carrying medevac passengers who need to be transported from A to B in cases of medical emergencies," Gomes said.

Gomes stated that ASM is serving the growing market in the Middle East. "Our head office in Dubai provides flight support services 24/7. We also offer charter flight services.

□□□□□

According to Gomes, new general aviation operators are joining the market in Dubai and Abu Dhabi. "The market is growing, and we need more aircraft of different sizes to operate to various destinations. That's why we are acquiring long-range aircraft to compete with other operators and ensure we stay in the business."

In its efforts to consolidate its market in the Middle East, ASM is in the process of opening an office in Saudi Arabia. "Saudi Arabia is a promising market," Gomes said.

"I visited Saudi Arabia recently and held discussions with various stakeholders to understand how we can develop our market there. Operating from Dubai to Saudi Arabia, you can carry passengers into Saudi Arabia, but you cannot carry passengers out of Saudi Arabia to another destination or within the country due to the cabotage rules of the Saudi Civil Aviation Authority.

"The best solution we came up with is to establish a joint venture company with a Saudi local company, allowing us to operate flights within Saudi Arabia. That gives us the opportunity to carry passengers from Riyadh to Jeddah. It took us a long time to put all the necessary procedures in place, and now we are almost there," Gomes said.

ASM is also expanding its operations into Africa. "Africa is an emerging market," says Gomes. The company has an



▲ The market is growing, and we need more aircraft of different sizes to operate to various destinations. That's why we are acquiring long-range aircraft to compete with other operators and ensure we stay in the business. ▲ VITO GOMES

IMAGE: ASM

office in Nairobi, Kenya, close to the airport. "We provide services like ground handling and aircraft fuelling. We serve a number of international airlines, including Kenya Airways."

ASM's Nairobi office serves other African countries, including Angola, Mozambique, South Africa, and Ethiopia. "We operate charter flights to Ethiopia and fly Hajj flights from various African countries to Saudi Arabia."

□□□□□

The air transport market in Africa is growing. However, operators face a number of hurdles that affect their operations on the continent, with high taxes being one of the major challenges.

According to Gomes, passenger and airport taxes are burdensome. "There are various agencies collecting the same tax from the same airport," he lamented. "We always look for opportunities to develop more destinations in Africa, including acquiring ground-handling companies at airports. I hope things will improve as the market in Africa continues to grow," he added.

With an annual turnover of one billion USD, ASM has 86 staff based in Dubai. ▲

The Hub of Business Aviation



10 - 12 DECEMBER 2024

DWC, Dubai Airshow Site

MEBAA Show, the Middle East's premier business aviation event, returns this December for its 10th anniversary edition bringing the business aviation community together to take advantage of the significant growth in the region.



Follow us on:



Register now:



www.mebaa.aero



This year the Qatar Emiri Air Force is celebrating its 50th anniversary. To spread the word of this rapidly-expanding air arm on its golden anniversary, the QEAF has sent aircraft to two big air shows recently. Alan Warnes reports.

The Royal International Air Tattoo at RAF Fairford in the UK, on July 19-21, regarded as the biggest in the world, was the first. This was followed by the Egyptian International Airshow, the newest fixture on the airshow calendar, at El Alamein on the southern Mediterranean coast from September 3-5.

Personnel from the QEAF, much to their credit, stood alongside their nine aircraft in the RIAT static display, interacting with the general public.

The biggest was a C-17A Globemaster III wearing Qatari Airways markings, which brought in a NH 90 helicopter that was displayed alongside. The remainder of the static show included a RAF-QEAF 11 squadron joint training unit Hawk T2 based at RAF Leeming.

Joint RAF-QEAF unit, 12 squadron from RAF Coningsby brought a Typhoon FGR4. While another Typhoon (not yet delivered) by BAE Systems, ZR521/QA420 was also present. A pair of 12 squadron Hawks flown by QEAF pilots remained parked away from the static display.

Undoubtedly, though the most impressive QEAF assets on show, were two F-15QA Ababils, which showed off their manoeuvrability and sheer power in the flying display – one fully armed and the other clean of any weapons. There was a sizeable presence at El Alamein too, with two Typhoon FGR4s, an AH-64E Apache Guardian, NH 90 helicopter, C-17A Globemaster III and a Pilatus PC-24. No Boeing F-15QAs though!

■ A LITTLE BACKGROUND

The willingness to show their aircraft off illustrates how the QEAF has progressed from an air force created in 1974, with cast-off Hunters from the Royal Netherlands Air Force –

QEAF shows its gold star quality

three single-seat F78s and a dual-seat T79.

They were replaced in 1983 by six new Dassault-Breguet Alphajet Es, followed by three single-seat Dassault Mirage F1DDAs and F1EDA as Qatar continued to look to the French to supply them with new aircraft, which also included up to 14 SA342L Gazelles and Westland Lynx Mk 28s.

The Mirage F1s made way for nine cutting edge Mirage 2000-5EDAs and two single-seat Mirage 2000-5DDAs. These remained in service alongside the Alphajets up until the early 2020s. Five of them were donated to Morocco in 2021. The future of the Dassault Mirage 2000-5s is not so clear-cut. Plans by the Indonesian Air Force to acquire them in 2021 have now been shelved. Instead, it is looking increasingly likely that the delta-winged fighters will be transferred to the Indian Air Force, once the necessary formalities have been completed.

■ HERE COME THE FIGHTERS

The Doha government used its wealth from being the world's biggest exporter of liquefied natural gas, to boost its military in a massive way in recent years. Concerned with the strategic ambitions of some Middle East players when ostracised by the Gulf Cooperation Council between 2017 and 2021, the QEAF ordered an incredible 96 new fighters between 2015 and 2017. At the time it was operating just nine Mirage 2000-5s and six Alphajets.

Initially the QEAF ordered 18 Dassault Rafale EQs and six dual-seat DQs in a \$7 billion deal during April 2017, with the first delivered in June 2019 and was subsequently boosted in December 2017 by an additional nine EQs and three DQs previously on option. Qatari Rafales are equipped with the Sniper targeting pod, the first time a foreign system has been adopted for the French jet.

In November 2016, the US green-lighted a deal for 72 extremely capable Boeing F-15QAs, although only 36 were actually sold and entered service in October 2021. The deal valued at \$12 billion was signed off in June 2017 for 36 aircraft and 36 on option.

The first 36 were delivered by August 2023, and in June this year, it became obvious that an extra batch had been ordered, when four more of 12 were ready for delivery.

They were flown to RAF Lakenheath on the eve of RIAT, and two were re-positioned to RIAT and then Farnborough International Airshow where they gave quite a dynamic performance in the flying displays – one fully armed and the other clean.

The QEAF F-15QA pilots are now believed to be trained in country by Boeing, which is also providing logistical and technical support of the aircraft. An ex-Kuwait Air Force US instructor pilot employed by Boeing transferred to the QEAF F-15QA fleet in June, presumably to support the training need. Boeing was



Boeing display pilots flew two QEAF F-15QAs in separate displays during RIAT and Farnborough International Airshow, one in fully armed with 12 AIM-120 AMRAAMS as seen here and one in a clean configuration.

contracted in 2020 to establish and operate a QEAF aircrew and maintenance training center at Al Udeid Air Base, in 2024.

On December 10, 2017, BAE Systems announced a £5 billion contract to supply 24 Typhoon aircraft to the QEAF. The first deliveries took place in August 2022, ahead of the Qatar World Cup when the joint RAF-QEAF Typhoon squadron, 12 squadron, deployed to Qatar for six months. During the deployment, the unit supported the formation of the first operational QEAF Typhoon unit, 7 squadron and by mid-September 2024, 20 had been delivered, with the 21st going through flight testing.



The biggest military airshow in the world, the Royal International Air Tattoo, attracted nine QEAF aircraft to celebrate its 50th anniversary. This Typhoon FGR 4 was delivered to Qatar within days of appearing at the show, wearing 50th anniversary markings.

off to the UK. Where you will join the Joint Hawk Training Squadron, 11 squadron. Formally unveiled at RAF Leeming in North Yorkshire on November 24, 2021 the unit delivers advanced jet training to both QEAF and RAF pilots in nine new Hawk Mk 167s, that wear Qatari national insignia, but UK military serial numbers. Under the initial contract signed in July 2021 the Hawks would remain at Leeming for six years, though this is likely to be extended, as training in the UK prevents airspace congestion in Qatar.

Once completed, pilots will move to No 29 (Reserve) squadron the RAF's Typhoon Operational Conversion Unit based at RAF Coningsby, Lincs and if that goes well, on to No 12 squadron where Qatari pilots will learn to fly the Typhoon tactically. The unit was officially re-established on 24th July 2018 to become a joint RAF-QEAF squadron, integrating personnel from both nations. In March 2023, the contract to operate this bilateral squadron was extended by another two years.

The QEAF also has instructors and students based at Italy's International Flight Training School (IFTS), initially at 61st wing at Lecce-Galatina and then at Deci, Sardinia in the near future. They fly the Leonardo T-346, with the QEAF owning six of the IFTS aircraft. The first six QEAF students concluded phase IV of the advanced/lead-in to fighter training programme in July 2022. The successful students progress to either the Rafales or F-15QAs.

If the would-be pilot is destined for helicopters, then after leaving the academy the student will usually be posted to the US Army Aviation Training Centre at Fort Novosel (formerly Fort Rucker). One helicopter pilot the author met at El Alamein, flew 130 hours on the UH-72A at Cairns Army Air Field, and then 60-80 hours on an Apache D/E at Hanchey AAF inside a year, in 2019, to become a qualified AH-64E pilot. That's some going.

The QEAF also regularly visits Turkey for tactical exercises at Konya Air Base, where they participate in Anatolian Eagle or Anatolian Phoenix. ▲



ELEVATE YOUR AEROSPACE BUSINESS AT THE BAHRAIN INTERNATIONAL AIRSHOW!

The Bahrain International Airshow returns next November to continue its journey, providing an unrivalled platform for innovative and personalised commercial networking. A valuable and unmissable opportunity facilitating international trade and leveraging opportunities.

**NETWORK, PARTNER AND
EXPLORE INNOVATIONS AT
THE GULF'S TOP EVENT**

Visit **Airshow.bh**
for more information

18-20 November 2026

Sakhir Airbase, Kingdom of Bahrain



The Egyptian Air Force's combat edge on show – MiG-29M2, Mirage 2000EM, F-16C Block 52 and Rafale EM – sit opposite the VIP pavilion.
IMAGES: ALAN WARNES

EGYPT'S SURPRISE PACKAGE

The recent Egyptian International Airshow, which took place at El Alamein airport from September 3-5, provided us with an insight we seldom get into the Egyptian Air Force. Alan Warnes takes a closer look.

One of the biggest surprises was the number of its aircraft that appeared, but having taken control of the event a week or so before it started, it had to show its presence. The EAF commander, air marshal Mahmoud Abd El-Gawad was present throughout the show and the author saw him visiting several companies to thank them for their support and discuss possible purchases.

One of the biggest is the acquisition of 36 new jet trainers/light attack aircraft, which saw the 'best and final' bids submitted by contenders on September 17, 12 days after the EIS closed.

The bidders are known to include CATIC (with L-15), Korean Aerospace Industries (FA-50), Leonardo (M-345 and M-346) and Turkish Aerospace (with Hurjet). They are vying to replace the EAF's fleet of Alphajets, that numbered 30 when deliveries occurred in the early 1980s.

The number is now likely to be in single figures. While Czech aerospace company, Aero Vodochody was present, with a prototype L-39NG in a bid to raise awareness of the jet, when according to one source 'competition to replace the 90 strong surviving fleet of K-8 Karakorams is announced'.

These Chinese jet trainers, designed by Hongdu, were delivered between 2004-10, with around 80 assembled at the Helwan-based Arab Organisation for Industrialisation (AOI). However, in recent years, the aircraft has suffered from support of the civilian Honeywell TFE-731 engine, which AOI overhauled.

This now looks to have been resolved, because on

September 4 representatives from Honeywell, according to AOI, signed a deal to start supporting the engines which should commence early in 2025. It was noticeable that the EAF's Silver Stars aerobatic team of K-8Es only saw nine aircraft fly in the display, not the normal 10.

Elsewhere, Lockheed Martin announced on September 3 that the Egyptian Air Force had ordered two C-130J-30 Super Hercules. According to EAF officials the aircraft would start arriving in 2026, and with the requirement for 12 as stated in a January 2022 DSCA notification, a Lockheed Martin source believed the 10 remaining aircraft would come in multiples of two every year afterwards. They will provide the EAF's transport fleet with a considerable boost as its fleet of 24 C-130Hs is now more than 50 years old and have operated in some tough conditions in Egypt.

□□□□□

There were regular Hercules flights, shuttling personnel into the show, and while old they looked in immaculate condition. One appeared in the static display. Elsewhere in the static display, the EAF showed off the combat edge of its vast fleet with a line-up in front of the VIP stand of a dual-seat Mikoyan MiG-29M2 Fulcrum E, Lockheed Martin F-16C Block 52 with conformal fuel tanks, Dassault Mirage 2000EM and a Dassault Rafale DM.

While the MiG-29M2, Rafale and Block 52 have been delivered within the past eight years, the Mirage 2000s are now nearly 50 years old and while only one unit, 82 Squadron at Birma-Tanta Air Base, flies them their days must surely be numbered.

There was some talk about an acquisition of Eurofighters in 2022, but that never materialised while Lockheed Martin was marketing the F-16 Block 72 at EIS, with a model sporting a Sniper lightning pod.

The EAF has the biggest fleet of F-16s outside of the US, with 240 Block 15s, 32s, 40s and 52s delivered between 1982 and 2013. Most need an urgent upgrade because of obsolescence and the Block 72 could be an ideal solution. With \$50 billion of military aid supplied by the US since 1979, the year of Egypt and Israel's historic peace accord, who could bet against it if they come free with a good selection of modern weapons. Unless of course the US would sell the F-35A...which is not likely. ▲



The Egyptian Air Force C-130H fleet is more than 50 years old, but judging from the example in the static display are still in good condition.

AVIATION WEEK
Intelligence
NETWORK

The Smarter, Faster Way to Grow Your Business

Access authoritative market insights and analysis along with company, program, fleet and contact databases covering the global aviation, aerospace and defense communities with an **Aviation Week Intelligence Network (AWIN) Membership.**



120,000 industry personnel



49,000+ global organizations



Details on 150,000+ commercial, business and military aircraft



16,000 suppliers of more than 175,000 products and services



Become a member today

Visit aviationweek.com/AWINinfo to schedule your demo.

AVIATION WEEK
NETWORK

Know. Predict. Connect.

FOSTER'S DNA ETCHED IN RIYADH MASTER PLAN

The next phase of the design for King Salman International Airport will bear the signature of Foster + Partners. The British architecture firm has been tasked with creating Riyadh's airport master plan.

When complete, King Salman International Airport is expected to be one of the world's largest airports covering an area of around 57 km², providing six parallel runways, several terminals, airport support services, residential and recreational facilities, and retail outlets.

With sustainability at its core, the new airport will achieve LEED platinum certification by incorporating cutting-edge green initiatives into its design and will be powered by renewable energy.

The airport aims to accommodate up to 100 million travellers by 2030, and up to 185 million passengers, with the capacity to process 3.5 million tons of cargo by 2050.

Prince Mohammed bin Salman bin Abdulaziz, prime minister and chairman of the Council of Economic and Development Affairs (CEDA) and chairman of the Public Investment Fund (PIF), says that this project will boost "Riyadh's position as a global logistics hub, stimulate transport, trade and tourism, and act as a bridge linking the East with the West."

The airport project is in line with Saudi



Riyadh's King Salman International Airport: It is expected to become the world's largest airport.
IMAGE: FOSTER + PARTNERS

Arabia's vision to make Riyadh one of the top 10 city economies in the world and to support the growth of its population to 15–20 million inhabitants by 2030.

King Salman International Airport will thus be transformed into an 'aerotropolis' offering a seamless customer journey, world-class efficient operations, and innovation. Blending tradition and modernity, the design of this transportation hub will delicately array Riyadh's identity and the Saudi culture "to ensure a unique travel

experience for visitors and transit travellers".

This ambitious project is part of PIF's strategy to unleash the capabilities of promising sectors and diversify Saudi Arabia's economy. It also matches the national transport strategy and the global supply chain resilience initiative.

The new airport is expected to contribute 27 billion Saudi riyals annually to non-oil GDP and to create 103,000 direct and indirect jobs, in accordance with the goals set by the Kingdom's Vision 2030. ▲

THREE-WAY DEAL TO OPTIMISE FLIGHT OPS

The General Civil Aviation Authority (GCAA), Etihad Airways and Thales have joined forces to reduce climate impact in the Emirates Flight Information Region (FIR), environmental sustainability being an absolute priority for UAE airlines.

The partners will test solutions developed by Thales as part of its "Thales Orchestrator for Eco-Friendly Trajectories", enabling airspace users to implement optimised trajectories "in a simple, fast and efficient way".

The new air traffic control – airlines collaborative systems will help them to follow more direct routes, adjusting their flight profiles in real time, using digital tools to enable better collaboration between airspace users and air navigation service providers (ANSPs).

□ □ □ □ □

This is fundamental as optimising flight operations is one of the main ways to reduce greenhouse gas emissions from individual flights and in turn, decarbonise the commercial air transport sector.

According to Saif Mohammed Al Suwaidi, director general of the GCAA, this initiative aligns with the UAE's ongoing dedication to sustainability as well as with the theme of 2024 year, sustainability.

"It underscores the GCAA's pledge to national priorities and the government's methodology, while also fulfilling our international commitments within the International Civil Aviation Organization (ICAO),



The agreement will see the partners testing ATM solutions that enable users to implement optimized trajectories in a simple, fast and efficient way. IMAGE: THALES

particularly the recent announcement in Dubai of the global framework for aviation fuel, which sets an ambitious goal of reducing global aviation emissions by five per cent by 2030."

The air transport sector in the UAE, which has soared since its inception, emerging as a global leader in air connectivity, is committed to reducing its carbon emissions to zero by 2050.

"This showcases a collective commitment to mitigating the climate impact of aviation, aligning perfectly with the UAE's visionary 2031 agenda. Etihad takes immense pride in contributing to this initiative,

leveraging innovative avionics and advanced flight operations to propel the aviation industry towards a more sustainable future", says Mohammad Al Bulooki, chief operating officer at Etihad Airways.

Collaboration is the cornerstone on the road to achieving net zero emissions. As Christian Riviere, Thales VP airspace mobility solutions, said: "Our innovations in terms of avionics and flight operations are very much driven by our desire to make aviation ever more sustainable, reducing the climate impact of civil air transport."

ANURADHA DEENAPANRAY CHAPPARD

AJW®

Complex Supply Chain?

We are your nose to tail solutions provider



AJW Group is the world-leading, independent, parts, repair, lease, engine, flight hour programme and supply chain solution integrator, transforming efficiency in commercial, business and defence aviation.

With hubs and offices on every continent - including AJW Technique, a state-of-the-art component MRO facility in Montreal - nose to tail, we have you covered.

ajw-group.com

MENA players will have a significant and strategic role within the aircraft leasing market in the coming years.

Anuradha Deenapanray Chappard talked to Ali Ben Lmadani, CEO ABL Corporation about how funding options can help achieve rapid growth without compromising sustainability goals.

Making fund of leasing...

With the exception of the pandemic period, the region has been an important source of business for ABL Aviation, one of the first aircraft asset management platforms in the Middle East and North Africa region (MENA) with the opening of its Casablanca office in 2017.

“The Middle East and Africa remain attractive due to large fleet orders, fleet modernisation initiatives, and high-demand growth across both travel and cargo sectors. New attitudes about travel and the continued surge of e-commerce have also given rise to a regional air mobility renaissance across MENA, driving increased demand for narrow-body jets”, Ali Ben Lmadani, CEO ABL Corporation, told *Arabian Aerospace*.

The industry has been facing significant challenges like soaring interest rates, which has increased the cost of capital, therefore placing pressure on airlines, especially those with weaker financial positions.

According to ABL Aviation, the leading global independent aircraft leasing and asset management firm, lessors are essential to the aviation industry, providing flexible financing solutions that help airlines manage capital expenditures without substantial upfront investments.

“We expect to see these trends continue and for airlines to continue relying on leases to capitalise on them. We also expect to see growing reliance on leasing to provide cost-efficient solutions to airlines and flexibility that better equips them to respond to changes and disruptions in demand,” said Lmadani.

□ □ □ □ □

The company offers tailored leasing solutions to airlines in the region and beyond.

ABL Aviation is the leading provider of Japanese Operating Leases (JOL) and Japanese Operating Leases with Call Options (JOLCO). ABL relies on these products to help to bring more diverse and cost-effective funding options to the aircraft sector, while affording our airline partners the ability to fund 100 per cent of their asset costs”, he explained.

He underlined that JOLs and JOLCOs are particularly attractive in a high-interest rate environment. With US rates expected to slowly decrease, there’s a growing interest in innovative debt structures, including the combination of traditional JOLCOs with sustainability-linked financing or with Aircraft Finance Insurance Consortium (AFIC) products.

JOLCOs also offer significant sustainability advantages, including tax benefits and flexible leasing terms, which are especially beneficial for airlines aiming to align



IMAGE: ABL AVIATION

long-term ESG and commercial goals while also achieving current sustainability targets affordably.

According to Lmadani, these can be powerful tools in the industry’s transformation because they are appropriate and equally advantageous to both global and regional carriers.

“As with other regions, we see MENA airlines moving towards more eco-friendly and fuel-efficient aircraft. Sustainability-linked leasing and financing terms offer incentives for airlines to lower their carbon emissions, particularly by using sustainable aviation fuels (SAF). ABL Aviation is at the forefront of this movement within the leasing industry in the Middle East, exemplified by our delivery of a Boeing 787-8 Dreamliner to EL AL Airlines in August 2023, which utilised 30 per cent SAF on its delivery flight.”

□ □ □ □ □

The leasing landscape is evolving rapidly in the region. In Saudi Arabia, AviLease, launched by the Public Investment Fund (PIF) in 2022 and headquartered in Riyadh, is supporting the aviation ecosystem in line with Vision 2030, a nationwide initiative that, besides increasing non-oil international trade, also seeks to develop tourism and reinforce economic and investment activities within the Kingdom. According to the company, with strong local carriers such as Saudia, flyadeal, and flynas, more elements needed to be thrown into the mix.

The company’s portfolio consists of the latest generation of narrow-body and wide-body aircraft from the world’s leading manufacturers. “AviLease aims to become one of the world’s top 10 aircraft leasing companies by 2030,” said AviLease CEO, Edward O’Byrne.

Last September, AviLease, announced that it had successfully raised USD2.5 billion five-years unsecured term facility to fully refinance a bridge facility the company raised in 2023.

The global aircraft leasing market size was valued at USD 172.88 billion in 2023 and is projected to grow from USD 183.23 billion in 2024 to USD 401.67 billion by 2032. In accord with market analysts the increasing number of next-generation aircraft fleets in the United Arab Emirates, Saudi Arabia, and Qatar is the major reason for investments in the Middle East aircraft leasing market. ▲

▼ We expect to see growing reliance on leasing to provide cost-efficient solutions to airlines. ▲
ALI BEN LMDANI

GULF AIR TO BUILD NEW MRO FACILITY IN BAHRAIN

Gulf Air is to create a new maintenance, repair and overhaul (MRO) facility at its Bahrain hub, which will service both its own aircraft and those of other airlines.

Construction of a new Gulf Air MRO facility is expected to start soon, the airline said in September, with the site expected to be operational 18 to 24 months after breaking ground.

The national carrier of the Kingdom of Bahrain said that strategic expansion and financial efficiency are the main factors behind creating the new facility.

“In our ongoing efforts to enhance operational efficiency and overall performance, ‘insourcing’ our MRO services would result in operational improvements,” said an airline spokesperson.

□ □ □ □ □

“Insourcing will allow for a considerable reduction in the duration of maintenance checks, thereby improving aircraft availability and maximising revenue-generating opportunities.”

The development will also generate employment opportunities for Bahraini nationals and build skill-sets for the future, thereby contributing to the Kingdom’s economy.

It also holds the potential to develop Bahrain’s aviation ecosystem. As part of this process, Gulf Air is keen to collaborate with component service providers to set up approved repair facilities.



The state-of-the-art facility will consist of a temperature-controlled multi-bay hangar, along with workshop and warehouse facilities. It will be able to accommodate one Code E (widebody) and one Code C (narrowbody) aircraft, or three Code C aircraft simultaneously. There will also be a dedicated apron and parking for more aircraft.

The new facility will allow Gulf Air to handle major checks for its fleet of narrowbody Airbus

A320-family aircraft and widebody Boeing 787s. Gulf Air currently holds EASA 145 and BCAA 145 approvals for various maintenance activities.

“Establishing an MRO facility is a strategic investment providing long-term benefits for Gulf Air and Bahrain’s aviation industry. We are confident that the final product will enhance our operational efficiency and open up new avenues for revenue generation and market expansion,” said the airline spokesperson. ▲



World Class Aircraft Hangar Doors



🌐 jewersdoors.co.uk

✉ sales@jewersdoors.co.uk

☎ +44 1767 317090 (UK)

☎ +971 4 430 9002 (UAE)

follow us on



Jewers Doors also on



A test flight to demonstrate the potential for converting Methanol to SAF using an Airbus Helicopters aircraft took place on the sidelines of COP28 in the UAE. IMAGE: MASDAR



UAE SUPPORTS SAF PRODUCTION TO DECARBONISE AVIATION

Since 2006, Masdar, the UAE’s clean energy powerhouse, has been a key enabler of the Emirati vision as a global leader in sustainability and climate action. It is now partnering with TotalEnergies to assess the viability of producing SAF from green hydrogen.

This marks a strategic step towards a sustainable future and follows a successful test flight carried jointly during COP28 last December. Results showed that there is much potential for converting methanol.

The Masdar-TotalEnergies project will also capture and use CO2 from an industrial source as a feedstock, in addition to green hydrogen from renewable energy-powered electrolysis, to produce green methanol and SAF.

The deal is in line with Abu Dhabi’s low-carbon hydrogen policy, which is expected to

significantly promote low-carbon hydrogen as a future energy source and ensure economic growth, sustainability, and energy security.

This policy complements the UAE national hydrogen strategy, which seeks to establish the UAE as a leading global producer of low carbon hydrogen by 2031.

The UAE’s general policy for sustainable aviation fuel set a voluntary target of providing one per cent of fuel supplied to national airlines at UAE airports using locally produced SAF by 2031. It also aims to develop a national regulatory framework for SAF by exploring potential policies to support the long-term economic operation of SAF facilities.

Over more than two decades, Masdar has developed and partnered in projects in more than 40 countries, with a mandate to increase

its renewable energy portfolio capacity to 100GW by 2030, and become a leading producer of green hydrogen.

"Masdar’s ambition is to drive the development of green hydrogen around the world", says Mohammad Abdelqader El Ramahi, Masdar’s chief green hydrogen officer. He underlines that Masdar and the UAE are committed to producing "massive clean energy and green hydrogen potential, alongside our Africa renewable energy champion Infinity Power Holding (IPH)".

Masdar has partnered with Africa50, the pan-African infrastructure investment platform to identify, fast-track and scale clean energy projects across the continent. Masdar is also developing Africa’s largest wind farm in Egypt with IPH and other partners. ▲

SANAD SEALS AIRBUS ENGINES DEAL

Mubadala-backed aerospace engineering and leasing solutions provider Sanad has signed an agreement with Airbus to provide MRO services for engines powering the manufacturer’s single-aisle aircraft, such as the A320 and A321, and wide-body aircraft, including the A330.

The agreement formalised at the last Farnborough International Airshow includes the Rolls Royce Trent 700, International Aero Engines V2500-A5, and CFM LEAP-1A which power Airbus’ single-aisle aircraft.

According to Ismail Ali Abdulla, head of UAE clusters at Mubadala’s UAE Investments Platform, this agreement is an extension of Sanad’s longstanding strategic alliances with the world’s leading aerospace companies. "It reflects the unwavering confidence of global aerospace leaders in Sanad’s engineering, and technical capabilities, which has positioned it to significantly impact the global aviation sector from its base in Abu Dhabi."

By adding Airbus as its latest partner, Sanad shows once more its commitment to deliver world-class MRO services. "The agreement solidifies our position as a trusted partner in the aerospace



industry", says Mansoor Janahi, managing director and group CEO of Sanad.

Through its comprehensive portfolio, Sanad serves numerous flagship clients ranging from global OEMs and more than 30 airlines, including Etihad Airways, Fly Dubai, Saudia Airlines, American Airlines and Asiana Airlines.

Located on the campus of Zayed International Airport, Sanad is the region’s largest independent MRO services provider, with 37-years of expertise and legacy.

It plays a pivotal role in the growth of the UAE’s non-oil exports of goods and services by supporting foreign trade, with more than 90 per cent of its

revenues generated from outside the UAE. The company aims to bolster investment and continue its strategic partnerships with major global industry leaders to strengthen both Abu Dhabi’s and the UAE’s position as "an influential global hub for the aviation industry".

Last year, Sanad maintained 142 engines across four engine types – IAE V2500, GE Aerospace GENx, Rolls-Royce Trent 700 and CFM International LEAP – marking the highest number in its history. This year, Sanad’s target is to service 170 engines and to add a new maintenance line, with an ambition to provide MRO services to more than 200 engines in Abu Dhabi by 2025. ▲

TPAerospace

KEEP.
IT.
SIMPLE.

WHEELS AND BRAKES.
IT’S THAT SIMPLE.

A scandal last spring involving faked documentation of aircraft engine parts led the MRO industry to question whether blockchain technology would prevent this from happening, and if so, why it is not more widely used. **Chuck Grieve** investigates.

Blockchain - it could be just what the doc ordered...

Parts without documentation are next to worthless; parts with partial documentation only marginally less so. Global consultancy Deloitte found during a recent airline audit that more than 60 per cent of the issues arising from taking delivery of parts were down to poor or missing paperwork, which took on average 34 days to correct.

Add to that the not-unfounded concern that parts with fraudulent documentation can enter the supply chain and the need for absolutely secure records becomes clear.

One technology widely touted as a solution is blockchain. It's defined as a cryptographically-linked chain of immutable data or blocks recorded digitally on a ledger. All that's needed to check an item's blockchain, via a platform shared among ecosystem partners, is its hash or block number.

Deloitte said blockchain offers a 'part-centric' perspective that provides in essence the part's point of view, giving insights into how that part performs over its lifecycle, whether in the supply chain or while operating.

"Whether a company performs a dimensional check or other quality inspection, or documents the MRO process steps and parts consumed, the events can be pushed to the digital parts platform along with any supporting documentation. That event will be owned by its author, encrypted, and only seen by select parties in the ecosystem," wrote the consultancy.

"This level of chronological documentation of a part's history is fundamental to maintaining an asset's value, and greatly improves the level of effort involved in process sharing and managing records."

□□□□□

Unfortunately, blockchain's use has yet to reach critical mass in the MRO industry in the Middle East. A spokesperson for MTU Maintenance, the global aero-engine MRO, said blockchain "isn't something we're currently implementing," adding: "Some colleagues are quietly observing, but it's mostly just to be abreast of technology developments, should it become relevant later."

Similarly, at Lufthansa Technik, a company representative said the MRO does not at the moment use blockchain technology or related products, while a senior executive at Magnetic MRO said the company has no plans to introduce blockchain because it's not widely enough used yet.

It's not surprising that Abu Dhabi-based Sanad, with its reputation as a leader in the adoption of new technologies, has studied blockchain solutions closely, and was one of the first in the MRO industry to conduct a full pilot on its use.

That was in 2019, said Tej Mehta, head of strategy, and the pilot was "quite successful" from the aero-engine specialist's point of view.

The case for using it was compelling. It would become the distribution ledger to track and trace parts securely



Pilot study: innovative MRO provider Sanad ran a blockchain pilot with V2500 engines. IMAGE: PRATT & WHITNEY

▼ All that's needed to check an item's blockchain, via a platform shared among ecosystem partners, is its hash or block number. ▲

from source to end-user. With the collaboration of one of its main customers, Sanad worked with Block Aero Technologies to apply the system to the IAE V2500 engines it handled.

Mehta told *Arabian Aerospace* that Sanad would have scaled up its use of blockchain, and had started generating interest with other OEMs and customers, when the initiative fell victim to the Covid-19 lockdown.

Post-Covid, he said, it was "still part of our overall innovation agenda, but other things were a higher priority. I think at some point we may come back to it."

Although it would be difficult to get an entire value chain on a single blockchain, and probably impractical, he still saw value in using it in segments, with one OEM and supply chain, for example. "It doesn't get you all the benefits, but you still get some," he said, adding that in such a highly-regulated industry, acting on your own was not possible.

Meanwhile in the US, a nine-month study into unauthorised parts in the supply chain has recommended part suppliers adopt digitisation for key documents, and expand the use of digital signatures.

The recommendations were issued by a group of airlines, OEMs and MROs who came together in 2023 to address problems that had allowed parts with false paperwork to enter the supply chain.

Ultimately, for blockchain to work, it needs the whole aerospace ecosystem to get behind it, and that's not likely to happen soon. ▲



Mission possible: An artist's impression of the MBR Explorer spacecraft. IMAGE: UAE SPACE AGENCY

UAE hits asteroid belt mission milestone

The UAE has announced a new milestone in its Emirates Mission to the Asteroid Belt with the completion of the concept review of its lander, which is designed to land on and study the asteroid Justitia.

Hamed Abdulla Al Hashmi, EMA payload and lander manager, said: "This project demonstrates collaboration between the UAE Space Agency and Emirati space start-ups. Through this partnership, we are setting a new benchmark for space missions in the UAE, cementing the UAE's position as a key player in this industry."

The 13-year mission includes six years for spacecraft development and a seven-year trip through the main asteroid belt beyond Mars.

The MBR Explorer will seek to probe the origin and evolution of water-rich asteroids. It will also estimate the potential of using these asteroids as resources for future space exploration missions, determine the geologic history and volatile content of multiple main-belt asteroids, and measure their temperatures and thermophysical properties.

The explorer is named MBR after Dubai's ruler Sheikh Mohammed bin Rashid Al Maktoum.

The UAE has also won its bid to host COSPAR 2028, one of the largest space science

conferences in the world. This will be the first time the event, which promotes scientific research in space on an international level, will be held in the Arab world.

The event, which will be held in Dubai from the eighth to the sixteenth of July 2028, will bring together more than 3,000 researchers, experts, and scientists to present and discuss groundbreaking scientific research.

Sheikh Hamdan, the crown prince of Dubai, said: "The UAE has firmly established itself as a key hub for the global scientific community, particularly in the field of space research. This has further enhanced our nation's role in fostering significant international cooperation in the space sector."

As if to emphasise this, the UAE recently signed the "Satellite 813" agreement, which is the first space cooperation project between Arab countries.

The UAE Space Agency will fund and

supervise the project while the National Space Science and Technology Centre in UAE University will lead the execution of the project in collaboration with the Mohammed Bin Rashid Space Centre and members of the Arab Space Cooperation Group.

The new satellite has been named "813" and refers to the date that marked the beginning of prosperity of the House of Wisdom in Baghdad under the reign of Al-Ma'mun.

The project is unique among hyperspectral satellites in terms of its weight, size and efficiency. The agency focused on several factors during its selection, including that the satellite be manufactured inside the country through scientific centres and laboratories.

This will help develop the local and Arab capacity in field of design, manufacturing, assembly, and testing as well as satellite ground operations and analysing the retrieved hyperspectral data. ▲

HALO TO STAGE SIXTH TEST IN SAUDI ARABIA

Saudi Arabia is to host HALO Space's sixth test flight using the company's real-size prototype capsule, *Aurora*, which will ascend 30km above the Earth's surface.

This comprehensive test will involve ascending altitude with the balloon, followed by a controlled descent and landing using the steerable parachute, combining elements from its previous flights in India and California.

HALO Space's 4.75m diameter pressurised capsule is designed to provide "a safe and unforgettable near-space experience", offering 360-degree views through its expansive windows and giving panoramic vistas of the stratosphere. ▲

MIRA CONDUCTS HAPS TEST FLIGHTS

Abu Dhabi-based Mira Aerospace has conducted a series of high-altitude platform station (HAPS) test flights in the UAE.

A joint venture between Bayanat and UAVOS, Mira Aerospace's HAPS aircraft, equipped with advanced Earth observation payloads, successfully operated at stratospheric altitudes for extended periods and collected high-resolution data.

Mira said the flights, conducted over Abu Al Abyad Island, collected valuable data and tested various scenarios for Earth observation and environmental monitoring applications from the solar-powered aircraft. ▲

AI THE KEY TO SAFER SKIES...

...AS LONG AS HUMANS ARE IN CONTROL

At the International Air Transport Association (IATA) World Safety and Operations Conference (WOSC) held in Marrakech at the beginning of October, a central message resonated with aviation leaders: while AI and technological advancements are transforming the industry, humans must remain at the helm. **Chloe Greenbank** reports.

Hosted by Royal Air Maroc, under the theme "Embracing innovation and technology for safe and efficient operations," the event saw aviation experts gather to discuss the future of the global sector against a backdrop of operational challenges, cybersecurity threats, geopolitical instability and extreme weather events.

Willie Walsh, IATA's director general opened the three-day event reaffirming that safety remains the number one priority. Citing the more than 4.4 billion travellers that flew safely in 2023, Walsh underlined that the industry must prioritise global standards, whilst cultivating a safety-first culture and leveraging data and innovations in technology to drive further improvements.

"Global standards are the foundation of aviation safety, but we must also use the growing capabilities of data analysis to better understand risks and foster innovation," Walsh added.

Artificial intelligence (AI) has proven to be a game-changer for airlines, particularly



Willie Walsh: "We must also use the growing capabilities of data analysis to better understand risks and foster innovation."
IMAGE: BILLYPIX

in optimising safe, sustainable operations. Royal Air Maroc's CEO, Abdelhamid Addou, highlighted how AI had significantly improved the airline's fuel efficiency programme, reducing carbon emissions by 20 per cent. He explained that AI allows real-time optimisation of flight routes, contributing to more sustainable and efficient operations. Ethiopian Airlines CEO, Mesfin Tasew, similarly praised AI's role in revenue management, aircraft maintenance, and customer service.

"Continuous adoption of new technologies is essential for enhancing safety, efficiency, and reducing costs," Tasew noted.

As airlines increasingly adopt AI and other technologies, the threat of cyberattacks looms large. Marc Parent, CEO of CAE, stressed that cybersecurity is "non-negotiable" in aviation. "Without cybersecurity, airlines wouldn't be flying. Every system must be protected," he said. The growing complexity of cyber threats demands significant investment in protective measures, ensuring that the digital systems supporting airline operations are secure.

While AI and technology innovations

are crucial for the future of aviation, speakers across the event reiterated that human innovation is still the driving force behind these advancements. Parent noted, "technology will never replace the human element. It's helping us, but we need to maintain a human touch."

Gill Sparrow, Emirates' manager of emergency response planning, reaffirmed the importance of emotional intelligence in crisis management. Reflecting on the Covid-19 pandemic, she explained how the rapidly-changing situation required human adaptability and decision-making. "Credibility can't be commanded during a crisis – it must be built from the start," she said.

□□□□□

She also urged airline leaders to support their crisis management teams, highlighting the need for strong internal communication and preparedness. "We're the team that no-one wants to know about until there's an incident," she said. "Then all eyes are on us. There is a place for technology, but when it comes to a crisis, it's the human touch and how we respond as people that matters."

Meanwhile, Yannick Malinge, chief product safety officer at Airbus, addressed the challenges in delivering timely accident reports. He pointed to political interference, budget constraints, and a lack of resources as common obstacles.

Malinge called for greater investment in secondary investigations to ensure that critical lessons from accidents are learned and applied across the industry.

One key to fostering a strong safety culture is effective communication with frontline staff. Ground handler turned influencer/educator, Mohammad Taher, known as "The Airport Guy," urged leaders to connect with their employees on a personal level. He recommended using storytelling to share safety messages and build a safety culture in a way that resonates with staff. Taher encouraged leaders to "sit in the mud" with their staff when things go wrong, fostering a culture of empathy and support. "People don't remember what you said, they remember how you made them feel."

In a session on safety leadership, Ashish Jain, senior vice president of group safety and security at Qatar Airways, discussed the importance of adapting to changing circumstances. He recounted how Qatar Airways successfully navigated the 2017 airspace blockade and the challenges of operating during the Covid-19 pandemic. Jain attributed the airline's resilience to robust planning, clear leadership, and empowering staff to take decisive action.

"We had a clear vision and clear leadership. That made it easier to empower the team and get things done," Jain said. He also emphasised that safety and the customer experience should never be compromised, even in the face of

extreme operational challenges.

The final panel session reflected on the opportunities presented by rapid technological advances. Marie-Pier Berman, VP and chief of operations, Nav Canada, emphasised the importance of collaboration within the aviation ecosystem. "We are all part of one system, and we need to learn from each other to move forward together," she said. It was a point reiterated by Yannick Malinge, who added that the collective efforts of industry stakeholders have been instrumental in reducing accident rates.

□□□□□

Jennifer Homendy, chair of the National Transportation Safety Board (NTSB), closed the event reaffirming that safety is fundamentally about people. "Our greatest asset is our workforce. Technology should supplement safety efforts, not supplant them," she said, praising the industry's dedication to safety. She also highlighted that in 2023 there were just 1.87 accidents per million departures.

The consensus from the WSOC was clear: while AI and other technologies offer significant potential for improving efficiency and safety, the human element is irreplaceable. As the aviation industry faces ongoing challenges and strives for greater collaboration, the future will undoubtedly be shaped by the successful integration of both AI and human expertise. ▲



Gill Sparrow: "We're the team that no-one wants to know about until there's an incident."
IMAGE: BILLYPIX

Cybersecurity risk on the rise

In today's interconnected world, geopolitical conflicts increasingly lead to cyberattacks, disrupting aviation infrastructure and compromising sensitive data. Aviation is an attractive target for hackers, especially during conflicts, and cyber events could soon become the first line of disruptive action. Panellists at the conference emphasised the need for proactive cybersecurity strategies, robust regulatory frameworks, and continuous training to mitigate these risks.

"We need to recognise that the gulf between traditional safety and security sphere has become smaller, but between cyber security and security it has increased," said Guy Murray, aviation security, threat and risk, (A-STAR) TUI northern region. He called on stakeholders to embrace the importance of integrating cyber resilience into traditional security measures to ensure a comprehensive defence strategy.

Too focused on 90-Second Rule?

The 90-second evacuation rule, introduced in 1966, was designed to ensure aircraft could be evacuated quickly.

However, Anabel Brough, safety manager, Emirates Airlines questioned its relevance, noting that real-life emergencies don't happen in controlled environments. She emphasised the need for better training that empowers crew to make real-time risk assessments and adapt to unpredictable scenarios and shifting passenger behaviours.

The rule must also adapt to evolving cabin design and constantly changing configurations of airline seating. "As airlines prioritise passenger privacy or increasing passenger capacity with new cabin layouts, we need to consider how these changes affect the crew's ability to access passengers before or during an emergency."

Managing risk amid unrest

"With instability in the Middle East, airlines must remain agile and ready to adjust flight plans at short notice," said Mark Walters, managing director, aviation, Marsh. He highlighted the importance of having systems in place to provide round-the-clock security advice, enabling airlines to reroute or cancel flights as needed. Willie Walsh noted there are various companies like Osprey Flight Solutions providing this sort of advice which Marsh uses to help manage risks. "There are also airspace and other restrictions to contend with, either by national authorities, through NOTAMS, or by insurers which might also occur at very short notice," he said.

He also explained that "insurance premiums are established once a year at renewal time and remain at that level of premium despite significant changes in exposure that may occur within that period". ▲

Egypt was the scene for the world's newest airshow, which attracted respectable numbers of exhibitors and visitors. Its organisers hope it will become a regular Middle East fixture alongside the Dubai and Bahrain events. **Alan Dron** reports.

AIRSHOW PUTS EGYPT ON THE WORLD STAGE

A small, but well-packed exhibition hall, interesting static and flying displays, together with 15,000 visitors, were among the highlights of the first Egypt International Airshow.

Held at El Alamein International Airport, around 250km west of Cairo, the airshow's site is a small, but modern, regional airport that is already being expanded as the gateway to the fast-growing city of El Alamein, which Egypt aims to become the country's next major holiday destination.

At present, the airport has only a small number of daily scheduled and executive flights. This meant that there was plenty of space on the apron for show exhibitors to bring in their aircraft.

Perhaps noting the success of the UAE and – increasingly – Saudi Arabia in using aerospace as a driver for their wider economies, the Egyptian organisers were keen to show their country's skills in the sector.

If all goes well, there are plans to make the event a biennial affair, alternating with Dubai International Airshow years. The only problem may be that, at present, the Egyptian show falls within three months of the existing Bahrain International Airshow.

The importance of the show to Egypt was marked by a visit on the first day by Egyptian president Abdel Fatah El-Sisi, who spent several hours touring the exhibition hall and aircraft.

The show was strongly biased towards military exhibits, both on the ramp and in the

exhibition hall, with Russian, Chinese, Turkish and local Egyptian companies all making a strong showing among the 200-plus exhibitors.

The Egyptian Ministry of Defence and Egyptian Air Force were prominent in the show's organisation, together with the Ministry of Civil Aviation, the Egyptian Space Agency, and EgyptAir.

Given the degree of local defence involvement, it was unsurprising to see a range of Egyptian Air Force aircraft on the ramp, including a Mig-29SMT, Lockheed Martin F-16, Lockheed Martin C-130H, Dassault Rafale DM and Mirage 2000EM, plus a Mil Mi-172 VIP helicopter and several executive jets.

The C-130 family accounted for the only military order announced during the show, with Egypt signing a deal for two C-130Js. As the country's air force starts to replace its elderly C-130Hs, more orders are expected.

Qatar and the UAE were also prominent on the static display, with the Qatar Emiri Air Force sending several aircraft to the show, including a Boeing C-17 Globemaster III strategic transport in a Qatar Airways colour scheme, a Eurofighter Typhoon, an Airbus Helicopters NH-90 and Boeing AH-64E Apache attack helicopter.

Russia's Rosoboronexport and China's CATIC occupied major stands in the exhibition hall. China also showed off its Bayi aerobatic team with their J-10 fighters and there were reports in several local publications - as yet unconfirmed - that Egypt had signed a major

order for J-10Cs to replace at least part of its 200-strong fleet of F-16s, which are some of the oldest still in frontline service globally.

Other military aircraft manufacturers were also present, hoping to make deals. The Czech company Aero Vodochody showed its L-39NG advanced trainer, which has recently won its first export order from Vietnam.

Aero also has ambitions in Africa: "We are returning to the African continent, where Aero has a great tradition, because we believe the L-39NG has great potential here," said the company's chairman and president, Viktor Sotona.

Sotona stressed the aircraft's versatility in multiple roles, including training, light attack and ISR (intelligence, surveillance and reconnaissance), together with its ability to accept either Western or Eastern avionics. "In addition, we have long experience in manufacturing and assembling aircraft in Africa. We are also considering establishing an MRO centre there."

There were two international debuts. China's Xian Y-20 heavy transport made its first overseas show appearance, while Turkey's TAI Hürjet supersonic advanced jet trainer appeared at its first international show. Several Turkish companies, such as defence electronics manufacturer Aselsan, also took space in the exhibition.

Egyptian manufacturers were naturally prominent, with UAS manufacturer Robotic Engineering System displaying three main types.

The E-June 30 and Ahmous were both

optimised for the ISR role, with the former powered by two petrol engines and capable of staying aloft for 14 hours in the medium-altitude, long-endurance (MALE) category. It has been in Egyptian air force service for four to five years, while the latter is scheduled to start flight testing in 2025.

The third aircraft was the ambitious-looking 6th October model, which is due to fly for the first time next year. The version on display had a remarkable 16 underwing hard points, capable of carrying a payload of up to 1,000kg. According to a source at the show, it is essentially an upgrade of the E-June 30, will have a maximum take-off weight of 2.5 tonnes and be capable of flights of up to 30 hours.

Significantly, the show described itself as 'The gateway to aerospace in Africa and the Middle East.' Egypt, with one of Africa's largest economies, is particularly interested in

expanding its 'reach' on the continent and "The event aims to accelerate industrialisation, digitalisation, and globalisation in the defence, space, and commercial aviation sectors in Africa and the Middle East" according to the organisers.

Despite one problem on the second day, when the gates remained closed for almost three hours after the scheduled opening time, apparently for 'security processes and essential maintenance', according to the organisers.

Overall, the general impression was of a well-run show, with good facilities and an interesting line-up of hardware – arguably better than this year's much larger Farnborough Airshow in the UK.

Will it become part of the regular airshow circuit? The Egyptian authorities' intention at this point is for it to do so, with the next event scheduled for 2026. Let's wait and see. ▲

IMAGES: BILLYPIX



The Xi'an Y-20 Kunpeng is a large military transport aircraft.



Turkey's TAI Hürjet supersonic advanced jet trainer appeared at its first international show.



Aero Vodochody showed its L-39NG advanced trainer.



Egyptian Air Force Silver Stars perform during the airshow.

BAHRAIN PROMISES A BOUTIQUE FANTASTIC

This year's Bahrain International Airshow promises to have a 'new look and feel' after undertaking a programme of significant investment.
Ella Nethersole spoke to its director general, **Yousif Mohamed Mahmoud**.

For more than 10 years, the Bahrain International Airshow (BIAS) has been a platform of business generation for the global leaders of aerospace in the gateway to the Gulf. Now the event is returning this year, from November 13-15, and Yousif Mohamed Mahmoud, director general of BIAS has said he expects the event will exceed expectations.

"We have a very exciting airshow for all of our visitors this year," said Mahmoud. "The resounding success of the 2022 airshow saw more than 30 countries present, 186 participating companies across the display, exhibition hall and chalets, and 200 civilian and military delegations taking part.

"For the 2024 show, under the directives of HRH Shaikh Abdulla Bin Hamed Al Khalifa, personal representative of his Majesty the King, and chairman of the BIAS organising committee, we have grown our world-class aircraft display, exhibitor hall and delegation programme, and will provide visitors with an opportunity to network with high-level VIP decision-makers."

□□□□□

This year for the first time, the event has attracted new companies from China, Malaysia, Thailand, India, Egypt, Turkey, and Brazil in addition to GCC countries, Europe and USA. "Our international positioning has continued to grow and grow within the market," said Mahmoud. "We are thrilled to be welcoming leaders from across the world to Bahrain again, including Lockheed Martin, Rolls-Royce, Thales, Leonardo, CFM, DHL, Indra, BAE System, Otokar, DFS Aviation JARAMCO, Alpha Star, Al Ola Aviation, DHL Worldwide and Gulf Air, within our 40 luxury chalets and increased exhibition hall. "In addition to our international exhibitors, we have seen a huge amount of support and interest from many

regional businesses to get involved in the show once again. We are excited to have the likes of Beyond, Gulf Air Group, Cityneon ME, Alba, Bapco Energies, Bahrain Duty Free, Bahrain Airport Services and Al Salam Bank on-board as sponsors and partners of the show."

Mahmoud said the continued investment from the key international and regional aerospace leaders into the airshow demonstrates the supportive role BIAS plays in the industry and the need to support organisations in driving business and sharing knowledge.

This year's event promises to have a 'new look and feel' as it looks towards the next 10 years.

"We've unveiled a new identity for the airshow," said Mahmoud. "This campaign is a declaration of our unrelenting commitment to excellence, and the new branding is a representation of the airshow's role as a prestige feature of the aerospace industry calendar, attracting elite business, military, and political leaders from across the globe to Bahrain.

"We have also invested heavily in improving our family area of the show, creating an aerospace festival to celebrate 75 years of aviation in Bahrain. With new interactive activities, improved features and a focus on STEM opportunities for young people, we wanted to provide our community with a physical way to engage with aerospace and to celebrate how far we have come."

This year's event is also expected to have a 'thrilling' aerial display featuring the latest in both military jets and commercial aircraft. In total, the show will see 125 in attendance.

"For 2024, the flying display will be filled with the

world's most renowned military aircraft and display teams, with showcases from the likes of the RBAF Copra Zolo from Bell, RSAF Typhoon, Mirage 2000 & F16, Saudi Hawks, Boeing P-8 Poseidon flypast and the Indian Air Force's Sarang display team," said Mahmoud.

When asking Mahmoud what BIAS can offer that the Dubai Airshow can't, he said: "Bahrain has consistently played a pivotal role in fostering regional growth and innovation, positioning itself at the heart of the international aerospace sector.

"In the market of Middle East shows, we have carved out a unique role for Bahrain, in which we have specifically designed a boutique platform where businesses can engage with the region on a one-on-one level, as well as the rest of the world.

"Our mixture of first-class hospitality, delegations programme, conference agenda and world-class flying display enables Bahrain to do business with high-level professionals from industry titans, who travel in from all around the world, including the UK, USA, China, France, Cyprus, Egypt and Malaysia."

Yousif Mahmoud:
"We have specifically designed a boutique platform where businesses can engage with the region."
IMAGE: BILLYPIX



Packed programme: Aircraft on show in the MEBA static park.
PICTURE: MEBA.

The 10th edition of the MEBA Show is set to take place from December 10-12, 2024 in Dubai, and following a successful edition in 2022, which saw a 56 per cent increase in visitors from its previous edition, its organisers anticipate this year's event to be even bigger with more than 10,000 visitors expected. But just what can visitors expect?

"This year's edition of the MEBA Show is packed with exciting new concepts," said MEBA spokesperson Timothy Hawes, managing director of Informa Markets. "Besides focusing on innovation, sustainability and technology, visitors can also look forward to the return of BizAv Talks, which will gather more than 40 renowned speakers including C-level executives from Luxaviation Group, Sino Jet, Saudia Private, RoyalJet, TAG Aviation Europe, General Authority of Civil Aviation (GACA), and many more."

□□□□□

BizAv Talks will focus on transformative dialogue across three key themes – The Next Frontier of Business Aviation, Driving a Sustainable Future, and The Business of Business Aviation – offering strategic insights into both regional and global challenges shaping the industry's future.

The event will also include a new advanced aerial mobility (AAM) pavilion and startup hub to showcase the latest technologies impacting the business aviation industry.

Hawes added: "Other exciting features for this year include the new luxury boulevard and the runway party, with Falcon the sponsor for both.

"Located amidst the stunning private jet static display, the luxury boulevard will provide a prime stage to engage with

Geared up for a mega MEBA

This year's MEBA Show has a 'refreshed' agenda focusing on innovation, sustainability and technological advancements.

Ella Nethersole chatted with spokesperson **Timothy Hawes**, MD of Informa Markets.

brands showcasing luxury real estate, yachting, cosmetics, watches and more.

"Meanwhile, the runway party will be at Zenon, a fine dining destination that blends Mediterranean and Asian cuisine with cutting-edge AI-driven entertainment. This iconic night of luxury and elegance is not one to miss, with unforgettable entertainment and incredible networking opportunities."

A number of international and regional companies have already confirmed their participation as exhibitors to MEBA, including Boeing Business Jets, Airbus, Dassault Aviation, Bombardier, Embraer, Empire Aviation, Qatar Executive, DC Aviation, Vista and Saudia Private.

"The event has consistently drawn significant global participation, reflecting the strategic importance of the region in the global business aviation landscape," said Hawes.

"Many regional and international companies, including ExecuJet Aviation, ACASS, Luxaviation Group, Tag Aviation, AXIS Aviation, Air Independence, FAI Aviation Services, Aviation Horizons and more, have already registered to visit the event, and we're

excited to welcome these industry leaders and innovators across business aviation from around the world to Dubai."

As ever, plenty of business jets will be displayed on the static showcasing a range of cutting-edge aircraft from leading manufacturers, including Boeing Business Jets, Airbus, Embraer, Bombardier, Dassault Aviation, Qatar Executive, Vista, Amelia (by Regourd Aviation), and Comlux."

As business aviation in the Middle East continues to experience robust growth, driven by several factors, including economic diversification, an increasing number of high-net-worth individuals (HNWIs), and the region's strategic position as a global hub for business and tourism, Hawes said he sees further growth in the region, in particular, the UAE and Saudi Arabia.

□□□□□

"These two nations are at the forefront of this growth, with significant investments in infrastructure and the rise of new technologies like advanced aerial mobility (AAM)," he explained.

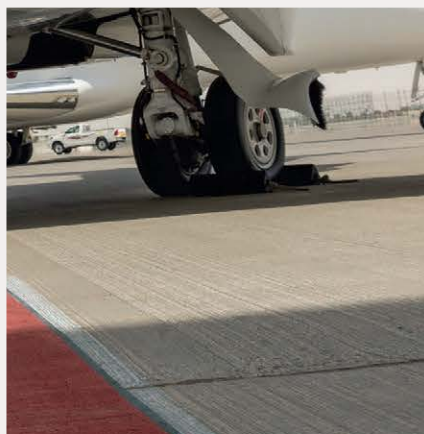
"The growing emphasis on sustainability is also propelling the industry forward. Over the next few years, we expect the sector to continue expanding as the region solidifies its role as a key player in global business aviation."

Hawes added that events, such as MEBA, play a 'critical' role in advancing the business aviation industry.

"These events provide a premier platform for stakeholders to connect, share insights and explore new business opportunities," he said. "By bringing together global leaders, innovators and disruptors, the event fosters collaboration and drives innovation within the sector."



Exciting features for this year include the new luxury boulevard and the runway party. **TIMOTHY HAWES**



An Unrivalled Aircraft Management Service...

Is proudly offered by DC Aviation Al-Futtaim

Operational in Dubai since 2013, we have been a consistent centre of excellence for quality business aviation operations in the Middle East. Managed by a senior team of business aviation executives, DC Aviation Al-Futtaim operates and manages aircraft, providing an exceptional range of capability, performance, and the satisfaction that comes with unmatched levels of customer service.

Get in touch with our team today to experience our passion for excellence.



▲ ALL IN A DAY

Peter Landquist

Marcelle Nethersole talks to the VP Sales, marketing and customer support at CTT Systems.

Can you tell me about what CTT does?

CTT's Humidifier Onboard generates the striking humidity increase that elevates humidity back to comfort and ground-like level; empowering better wellness and wellbeing for pilots, crew and passengers.

A cabin climate is more dehydrating than any place on Earth. On long-haul flights our body's natural moisture balance is disrupted, causing dry air induced fatigue, rapid degeneration of our immune system and impaired taste.

The CTT Humidifier Onboard system makes flying far more pleasurable!

How do CTT products help a passenger feel refreshed on arrival?

A VIP spacious cabin is the most dehydrating climate at altitude, an extremely dry cabin climate is counterproductive to the highest ambitions of those offered VIP features and services. The Humidifier Onboard solves this VIP paradox. Transforming the inflight climate to regain support for wellness and well-being.

The Humidifier Onboard puts climate conditions within VIP-level expectations.

Without a reliable and efficient onboard humidification system, the benefits of flying premium and/or private will be diminished. Instead of arriving with a body and immune system that suffers from dehydration, significantly better humidity transforms and elevates experience into pure serenity.

A humidification system is a small step in terms of equipment but a huge step for wellness and well-being.

In all its simplicity, it is an intangible but significant upgrade. Premium/VIP travellers feel better, sleep better, and have a better sense of taste. They arrive more ready to go and are less impacted by jet lag.

Without a reliable and efficient onboard humidification system, the benefits of flying premium and/or private will be diminished. 🌹

The company originally started with humidification for the VIP sector. Who are your clients now?

The VIP/private jet sector was an early adopter of the value of humidification onboard, educated and aware and with means to solve the dry air problem in aircraft cabins, Humidification Onboard quickly grew in popularity.

Customers are governmental organisations, large corporations, and VIP charter aircraft owners. Also, private wealthy individuals require their VIP and business jets to be equipped with Humidification Onboard.

Do cabin humidification system vary for different climates?

It does not vary anything, the dry problem at 30,000ft is the same wherever you are in the world, the air is extremely dry, hence a Humidification Onboard system is required everywhere.

Actually, the dry hot air in the Middle East typically holds a humidity of +25 per cent relative humidity (RH), which is similar to the air in the winter in the Northern hemisphere. While the air at 30,000ft is constant at one-three per cent without Humidification Onboard.

Are cabin humidifiers a standard product for long-distance travel in the future?

Today, humidification is almost a standard in a VIP/private jet aircraft cabin and on airline aircraft for flight deck and crew rest.

We believe over the next 10 years it will grow into a standard also on airline passenger cabin for long-haul aircraft.

No one wants to compromise on their health and immune system.

The OEMs of new aircraft offer humidification onboard for all airframes today.

What does a typical day hold for you in your role?

The day can vary, from discussing evolution of a next-generation Humidification Onboard system for private jet application with our R&D department, to advising clients how to improve their passenger cabin environment with Humidification Onboard on large cabin business jets where space is very limited. Over the past year I have worked intensively with clients and R&D to enhance our VIP systems to perform even better and simplify installation and operation.



IMAGE: CTT SYSTEMS



AIRCRAFT INSPECTION SPECIALISTS

OUR SERVICES

- Eddy Current Testing
- Liquid Penetrant Testing
- Magnetic Particle Testing
- Radiographic Testing
- Thermographic Testing
- Ultrasonic Testing
- Level 3 Consulting

ABOUT US

N.D. Technologies provides non-destructive testing support for the aviation industry from our headquarter in Shannon, Ireland (SNN) and also from our sister company in Dubai, UAE (DXB, DWC)

APPROVED BY:



CONTACT US TODAY!

✉ INFO@NDTECHNOLOGIES.IE

☎ +353 86 3606807 / +971 50 255 2012

🌐 WWW.NDTECHNOLOGIES.IE



— We invent them.
We design them.
We build them.

And one day,
we let them soar.

— We were meant to fly.



GE Aerospace