



# AFRICAN AEROSPACE

THE MAGAZINE FOR AEROSPACE PROFESSIONALS IN AFRICA

[www.timesaerospace.aero](http://www.timesaerospace.aero)



## IBOM HAS A BLAST

...AS IT TAKES THE MARKET BY STORM – PAGE 16

IBOM PREND D'ASSAUT LE MARCHÉ

### AIR TRANSPORT

RAM  
signs up  
to future  
growth

PAGE 22



### EVENTS

Positive  
steps at  
Aviation  
Africa

PAGE 32



### AIRPORTS

Uganda  
upgrades  
airstrips to  
boost tourism

PAGE 38





THE PERFECT PLACE

FOR BUSINESS AIRCRAFT

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

**AMAC AEROSPACE**

[www.amacaerospace.com](http://www.amacaerospace.com)

# Bringing world-class training to **AFRICA** since 2003



## FlightPath international

**BOMBARDIER BOEING AIRBUS EMBRAER**

### TRUSTED EXPERIENCE.

TORONTO • DUBAI • BEIJING • COSTA RICA • SPAIN • JOHANNESBURG • LATVIA • MALTA • KENYA

www.flightpathinternational.com • +1-705-434-0058



Published by



**TIMES AEROSPACE**  
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@timesaerospace.aero

**Display Advertising:**  
Grant Lee  
grant.lee@timesaerospace.aero

**Circulation Dept:**  
Clare Brown  
clare.brown@timesaerospace.aero

**Editorial:**  
news@timesaerospace.aero

**Editor-in-Chief:**  
Alan Peaford

**Deputy Editor:** Marcelle Nethersole  
ella@aerocomm.aero

**Consultant Editor:** Mark Pilling

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

**COVER:** George Uriesi, the managing director and chief operating officer of start-up Ibm Air in southern Nigeria.  
**PICTURE:** GEORGE URIESI

### Advertisers

Airbus	OBC
Airline Management Support Limited	15
AJW Group	51
Ait.academy	24
AMAC Aerospace	IFC, 1
Astral Aviation	18
Aviaco GSE	28
AviAssist Foundation	42
Bestfly Flight Support	8
BOSE Aviation	5
Caliphate Aviation Training Centre	55
CFM International	7
Chapman Freeborn Airchartering Limited	27
Dubai Airshow 2023	IBC
Egypt International Airshow 2024	49
Embraer Defense & Security	47
EPT Aviation Training	25
ETAM AVITAT Services	34
FlightPath International	2
Jewellers Doors Limited	41
MTU Maintenance	29
Rolls-Royce	10, 11
RwandAir	52
SAA Technical	37
SES	12
TCR International	21
VMS Aero	40
World Defense Show 2024	30, 31



African Aerospace magazine is published in partnership with AFRAA



African Aerospace magazine is published with the support of AfBAA



African Aerospace magazine is published with the support of CAASA

## Let's see action – as well as words

**T**he seventh Aviation Africa Summit and Exhibition took place in Abuja last month – the first time the premier aerospace leadership event had been to the west of the continent.

The delight at the move was palpable as more than 1,500 delegates from 75 countries came to Abuja's international convention centre.

As one of those proud to be involved and fortunate enough to be there, the opportunity to understand more about the region's demands was valuable.

With Africa's largest economy and one of the biggest populations in the world, Nigeria remains a country that doesn't have a specific national carrier. Various attempts have been made, and the current proposed contender, Nigeria Air, - 49% owned by Ethiopian and just 5% by the Nigeria government, the rest of the shareholding going to 'private' Nigerian interests – is currently held up in the court system awaiting legal confirmation that the launch is lawful and right for the country.

In the meantime, other Nigerian airlines were on show to demonstrate that they are on track to take up the mantle to serve the Nigerian people and inbound passengers.

Air Peace ordering new Embraer E175s and reinforcing its spot as West Africa's largest carrier; Ibom Air (see our cover story) bringing Airbus 220s to the region; and

Overland Airways stepping up to regional jets from its current all-turboprop fleet.

All are intent on creating greater connectivity at more reasonable prices than before, whether it be for domestic or proposed intra or inter-continental flights.

Meanwhile, initiatives for new MRO capabilities were announced as well as significant infrastructure investments including new airport terminals, equipment and runways.

Announcements are cheap and actions cost more than words. But Nigeria's new aviation minister Festus Keyamo impressed the packed auditorium with his commitment (and his own KPIs) to push Nigeria to a position as a hub – "not just for West Africa, but Africa as a whole."

With an impressive transparent regulator in place to support the new administration, there were key commitments to areas like SAATM and sustainable flight, and with numerous government ministers, regulators and industry leaders assembled there were immense opportunity for international collaboration, demonstrated by a technical agreement signed between the governments of South Africa and Nigeria.

The 2023 Aviation Africa Summit was a huge success for both the organisers and the host, the NCAA ... but the actions rather than words will be the icing on the cake

**Alan Peaford, Editor-in-Chief**



**04 Business Brief:** Regional round-up.

### ▲ AIR TRANSPORT

#### 13 Thinking on their fleet:

Ethiopian outlines massive fleet renewal programme.

### COVER STORY

**16 Case study:** Ibom Air offers a blueprint for the right way to set up an airline in Nigeria.

**19 Capital gain:** Air Algérie is developing its network to new destinations.

**20: Gabon accord:** Afrijet pioneers an electric regional aircraft.

**22: Moroccan role:** Royal Air Maroc focuses on the growth of tourism.

**26: TAAG's team:** Angolan airline finds that growing is more painful than expected.

**28: USP hub:** Kigali sets up as a cargo launchpad for Africa.

### ▲ EVENTS

**32: Summit special:** Four-page review of Aviation Africa 2023 - which confirmed that Africa's aviation industry offers the greatest potential of any geographic sector in the world.

### ▲ AIRPORTS

**38: Call of the wild:** How revamped Ugandan airstrips can boost tourism.

**39: Cape crusade:** Cape Winelands airport's vision for South Africa's western cape.

### ▲ GENERAL AVIATION

**40: Mission statement:** Eivind Lindtjorn's passion for flying in Africa.

### ▲ DEFENCE

**43: Defence round-up:** Latest updates from around Africa, including Chad, Gabon, Uganda, Nigeria, and Zambia.

**44: Rooivalk map:** South Africa's plan to upgrade its Atlas attack helicopters.

**48: Sales target:** Russia continues to supply arms to Africa.

### ▲ MRO

**50: Easing the pressure:** New certification adds capacity for MRO services.

### ▲ MANUFACTURING

**53: Engine room:** Pratt & Whitney reveals plans to launch an engine parts facility in Casablanca.

**54: Catching the bus:** Airbus is sitting comfortably with the A220.

### ▲ PEOPLE

**56 All in a day:** Nkechi Onyenso, CEO of Pathfinders International.

### F REPORTAGE EN FRANÇAIS

## AFRAA and IATA join forces to focus on Africa Initiative

AFRAA and IATA are to collaborate on creating a brighter future for the African aviation industry after signing a letter of intent.

Both will offer support towards six focus areas of "Focus Africa" initiatives and AFRAA initiatives such as the Aviation Stakeholders Convention (ASC) and the Africa Safety and Operations Summit.

"The renewal of the MoU between AFRAA and IATA is a noteworthy

testament of the commitment of our two organisations to better serve the air transport industry and deliver our respective mandates for the African region. Through enhancing the collaboration, the MoU facilitates the realisation of AFRAA and IATA's common vision for the development of a safe, secure and sustainable aviation industry in Africa," said Abdérahmane Berthé, AFRAA secretary general.



Let's work together: AFRAA secretary general, Abdérahmane Berthé, and Kamil Alawadhi – IATA regional vice president Africa and Middle East signed the letter of intent.

PICTURE: IATA

### Nigeria commitment

IATA said it has welcomed the commitment of the Federal Airports Authority of Nigeria (FAAN) to improving infrastructure at Murtala Muhammad International Airport within 12 months.

This follows a number of safety, security and passenger service level concerns in Lagos airport raised by IATA member airlines over the past year.

It is the main domestic and international hub connecting Nigeria with the rest of Africa and beyond and needs to keep up with demand.

"This strategic focus not only enhances the aviation sector, but also serves as a catalyst for Nigeria's broader economic and social advancement," said Kamil Al Awadhi of IATA.

### Mexican cargo hub

Ethiopian Cargo and Logistics Services has

repositioned its operations from Mexico City airport to the brand-new Felipe Angeles International Airport.

Ethiopian Airlines Group CEO Mesfin Tasew said: "We have been proudly serving the Mexican market from the bustling Mexico City Airport for over the past six years. Our services from MEX have been defined by building strong relationships, delivering impeccable services, and contributing to the growth of trade and commerce in the region. Our relocation to the Felipe Angeles International Airport brings with it a new chapter of possibilities."

### New IATA members

FlyNamibia has recently become a member of IATA. The airline's membership of IATA allows opportunities for its employees and its customers. By aligning with IATA's principles, and collaborating with a global network of industry leaders,

FlyNamibia will be able to offer enhanced services, and contribute to the growth and sustainability of air travel in Namibia.

■ In a separate presentation in Nigeria, Ibom Air was also named as a new member of IATA.

### Mwari orders

The Democratic Republic of Congo has ordered Paramount Industries' Mwari advanced reconnaissance, surveillance, and precision strike aircraft along with the integration of a weapons management system and command and control base. The company, based in the UK but with a manufacturing base in South Africa, also confirmed deliveries of the aircraft to Mozambique.

Steve Griessel, Paramount Global CEO said: "We've designed the Mwari as a tool that is not only robust but incredibly adaptable, fitting the needs of militaries in Africa and around the world."



PICTURE: KENYA AIRWAYS

## Kenya Airways and Lufthansa Technik sign component agreement

Kenya Airways (KQ) and Lufthansa Technik have signed a long-term contract for the supply of aircraft components for KQ's long-haul, Boeing 787-8 fleet.

The long-term contract will allow KQ to receive the proven total component support from the MRO specialist until 2028.

It will also give KQ access to Lufthansa Technik's worldwide parts pool, which will enable KQ to significantly increase the availability of spare parts for the Dreamliner fleet in a cost-effective manner.

"Kenya Airways embarked on a journey of returning to service aircraft that were parked during the pandemic.

"This resulted in an increased demand for parts to make aircraft ready for flight.

"There has been a worldwide shortage of some raw materials that has negatively affected some aircraft parts availability," said Allan Kilavuka, chief executive officer of Kenya Airways.

**BOSE**

Quiet the noise.  
**Amplify the experience.**

**NEW**

**BOSE A30 AVIATION HEADSET**

Less distraction. Less noise. Less pulling you away from the joys of flight. With unparalleled comfort and three selectable modes of active noise cancellation, the Bose A30 Aviation Headset enables flight the way it was intended.

**JOIN THE EXPERIENCE**  
[BOSEAVIATION.AERO/A30](http://BOSEAVIATION.AERO/A30)

**Ethiopian Airlines Group CEO Mesfin Tasew congratulates one of the female graduates.** PICTURE: ETHIOPIAN AIRLINES



**Graduates underline Ethiopian's investment in aviation people**

Ethiopian Aviation University has graduated 1,551 aviation professionals.

The professionals graduated in pilot training, aviation maintenance, cabin crew, commercial, and hotel operations professions.

Ethiopian Airlines Group CEO Mesfin Tasew said: "Human capital development is one of the key pillars in Ethiopian Airlines' growth strategic road map; this graduation is a testimony of our commitment to ensure that we invest a lot on our aviation 'brainery'."

"As part of our continental commitment, we will continue to provide Africa with skilled aviation professionals. We are delighted to see today youths from seven African countries completing one chapter and opening another in their aviation endeavours. We believe in the potential of Africa's youths to shape the continent's aviation and continue to educate them at our centre of excellence. Today the industry welcomes 660 male and 891 female graduates."

**Jo'burg connections**

Fastjet Zimbabwe has increased flight frequencies from Bulawayo's JM Nkomo International Airport to Johannesburg's OR Tambo International Airport.

Fastjet Zimbabwe's CCO, Vivian Ruwuya, said: "As a proud Zimbabwean airline, we remain committed to connectivity."

"We are delighted to offer 12 weekly flights from Bulawayo to Johannesburg. These extra frequencies will greatly enhance the flexibility we offer."

"It will allow for a genuine day trip for the South African on business, while also offering a similar opportunity for the Zimbabwean traveller."

African continent.

The foundation said: "AviAssist's approach focuses on promoting aviation safety and making training available and affordable for every country based upon a common interest in safe air transportation across the continent."

**US expansion**

Kenya Airways (KQ) and Delta Air Lines have extended their strategic partnership with inclusion of Kenya Airways' non-stop Nairobi to New York operated service.

Allan Kilavuka, Kenya Airways CEO, said: "The expansion of the codeshare is historic as it not only allows KQ to expand its

footprint in the U.S., but is also significant because it provides seamless connectivity on a single ticket for those travelling for business, leisure or studies into the U.S."

"It gives seamless connectivity to those visiting Africa through JFK and KQ's hub at Jomo Kenyatta International Airport in Nairobi."

**London bound**

RwandAir is to launch daily direct services between London Heathrow and Kigali this winter.

The African airline, which has been operating from London since 2017, will increase the capacity on its London Heathrow route from 29 October

2023, with the addition of a new daily service.

Yvonne Makolo, RwandAir CEO, said: "London is an incredibly important market for RwandAir, so we are incredibly excited to be adding direct daily flights from our home in Kigali to London Heathrow."

"Having first launched flights to the British capital in 2017, we have continued to build our presence following strong demand from customers here in the UK and Africa."

**STEM school**

Ethiopian Airlines, Boeing and ThinkYoung have launched the science, technology, engineering and mathematics or STEM

School, an initiative designed to equip young individuals and teachers in Ethiopia.

The programme focuses on underprivileged African youth especially women, fostering their pursuit of higher education in STEM with a focus on aviation.

The STEM School will be hosted at the Ethiopian Airlines Aviation University.

Ethiopian Airlines Group CEO, Mesfin Tasew, said: "We are delighted to launch the STEM School initiative, which helps Ethiopian youths to succeed in education and in their future careers, primarily in aviation fields, and to become the next generation of innovators."

**Fireblade Aviation invests in pilot and crew room at its Tambo FBO**

PICTURE: FIREBLADE AVIATION



South African-based business aviation company Fireblade Aviation opened a new pilot and crew room at its FBO at O.R. Tambo International Airport in August.

"Pilots and crew are important stakeholders in the aviation value-chain. This facility attempts to acknowledge that importance by considering their various needs, which includes flight preparation, dining and relaxation. To ensure safe operations, flight regulations stipulate minimum rest periods, which can be achieved at our facility," said Bradley Stall, executive FBO.

Stalls added: "The team behind Fireblade Aviation is driven by a passion for aviation and innovation within the industry, and this is what has spurred the investment to provide a premium state-of-the-art facility that is best-in-class on the African continent."



**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](http://cfmaeroengines.com)

VIP ground handling  
 Fast and efficient National and International flight dispatch  
 Overflight and Landing permits  
 Flight planning  
 Crew transfers  
 Hotel reservations  
 VIP Catering  
 Fuelling  
 Immigration  
 discover much more by contacting us

# BEST FLIGHT WITH BESTFLY

FBO, Aircraft Handling, Charter and Sales

**bestfly**

www.bestfly.aero @Bestfly.aero ops@bestfly.aero +244 931299129

## French banned from Niger airspace

Nearly four weeks after re-opening its airspace to international flights, the Republic of Niger has banned all French aircraft, including the Air France fleet, from operating there.

An official statement said this was the “will of the Niger people”.

Airspace had been closed to all traffic during a military coup in the country in August but resumed in early September.

An official notice to African air navigation service ASCENA from Niger said: “Niger has decided to restrict access to its airspace. This remains open to all national commercial flights and international aircraft, with the exception of French aircraft and those chartered by France, including the Air France fleet.”

## Benin airline progress

The government of Benin has acquired two De-Havilland DHC-6 Twin Otter aircraft which are believed to be part of the country’s ambition to launch a national air service.

The aircraft arrived in Cotonou Cadjahoun Airport on September 19.

The plan for a national carrier was announced in 2020 by the then transport minister Hervé Hèhomey and discussions were



PICTURE: FAHARI AVIATION

## Fahari ploughs investment into agriculture drone technology

Fahari Aviation, the Aviation technology subsidiary of Kenya Airways, has expanded its agricultural services with the addition of 14 drones.

This is in response to the growing demand for precision agriculture solutions such as: spraying and spreading of farm inputs aerial surveillance, crop monitoring, crop health surveillance and land inspection.

“The adoption of precision farming through drone technology

allows us to serve the evolving needs of farmers and agricultural producers.” said Hawkins Musili, general manager of Fahari Aviation.

The additional drones provide the capacity to cover larger areas, efficiently completing agricultural tasks of up to 300 hectares per day up from its previous capacity of up to 70 hectares per day. They have a wide range of functionalities, including spraying, spreading, seeding, and data collection on crop health and soil conditions.

underway with Rwandair.

Subsequently the state became a 30% shareholder in Benin Airlines Company (formerly known as Air Taxi Benin).

## Wet-lease

Madagascar Airlines has become the initial lease customer for A340 start-up USC. The German long-haul operator has conducted an initial wet-lease assignment for the African airline having recently secured approval for flights.

## Blocked refunds

Nigeria has returned \$29.2 million in foreign airlines’ blocked funds in the past

four months, according to the latest statistics released by IATA. The association said Nigeria presently accounts for \$783 million of blocked airline funds, while in another statement in June, it said Nigeria was withholding \$812.2 million in April 2023.

Nigeria also announced the resumption of diplomatic relations with the UAE. Flights to Nigeria had been banned by the Arab nation over the blocked funds issue.

## Angola hosts AASA

Angola will host the 53rd edition of the AASA (Airlines Association of Southern Africa) Annual General Assembly, which

will take place in Luanda from October 5 to 8.

This is the first time that Angola is hosting the event gathering key stakeholders from the ecosystem, namely, airlines, regulators, manufacturers, service providers, investors, diplomatic representations, and government entities.

## Every drop counts

IATA has reemphasised that ‘every drop of fuel avoided counts’ in the aviation industry’s quest to achieve net zero carbon emissions by 2050 with the latest result from the IATA Fuel Efficiency Gap Analysis (FEGA).

Marie Owens Thomsen, IATA’s senior vice president

sustainability and chief economist, said: “Since its inception in 2005, FEAGA has helped airlines identify cumulative savings of 15.2 million tonnes of carbon by cutting fuel consumption by 4.76 million tonnes.

“LOT is the latest example of an airline exploring all opportunities to achieve every incremental efficiency possible in fuel consumption. That’s good for the environment and for the bottom line.”

## Best African Airline

Ethiopian Airlines Group was crowned ‘Best African Airline’ at the Business Traveller Awards 2023.

## Special delivered: Airlink is in the black with Embraer eJet addition



PICTURE: AIRLINK

It might be unusual for an airline to be in the black – but Airlink, Southern Africa’s independent and privately owned regional airline, most certainly is.

The Johannesburg-based carrier unveiled a distinctive special-liveried new addition to its fleet in July.

Its newly-acquired Embraer E195 jetliner, now sports a classy jet-black paint scheme, and debuted on a test flight at O.R. Tambo International Airport and will soon operate on Airlink’s main domestic and regional trunk services.

“Some say flying has lost its allure, but as Southern Africa’s premier airline, Airlink is putting glamour and style back in the skies. In addition to our top-class service provided by our friendly crew in their stylish new uniforms, we have dressed one of our svelte Embraer E-Jets in an elegant and chic little black number,” said Airlink CEO and managing director Rodger Foster.



## Enabling the transition to Net Zero flight

The Rolls-Royce Trent engine family is already making a substantial contribution to sustainable aviation by maximising efficiency on every single flight.

In addition, all Trent engines can operate on blended Sustainable Aviation Fuel (SAF) up to 50%, enabling lower-carbon flying.

And by the end of 2023, we will have proven that all Trent engines are compatible with 100% SAF.

**#FlyNetZero #PowerOfTrent**  
**[www.rolls-royce.com/poweroftrent](http://www.rolls-royce.com/poweroftrent)**



## We're growing to keep you flying.

I believe in working with the best, but over my 10 years as CEO at SES, I've also come to appreciate the beauty and benefits of working with specialists.

Because SES are the CFM Specialist Lessor, with over 500 CFM engines strategically placed around the globe. It's a portfolio we're committed to growing, because we know that the more engines we have, the better equipped we'll be to keep you flying.

*Julie*

**Julie Dickerson**  
Chief Executive Officer

SES. The CFM Specialist Lessor  
ses.ie

**SES**  
**Fly Certain**



*The largest African aviation group, Ethiopian Airlines Group, has outlined an ambitious growth strategy dubbed "Vision 2035". One of the five pillars of the growth roadmap is its fleet, reports **Kaleyesus Bekele**.*

# ETHIOPIAN'S FLEET PATH

**I**n the wake of the Covid-19 pandemic, Ethiopian has registered a remarkable performance. According to Mesfin Tasew, Ethiopian Airlines group CEO, in the 2022-2023 budget year the airline transported 13.89m passengers, 12 percent more than the pre-Covid level. In 2019 the airline transported 12.1m passengers.

"We have already exceeded the pre-Covid level in terms of the number of passengers we carried. When it comes to cargo, compared with the pre-Covid period, cargo transported during the year was 80 percent higher compared with the pre-Covid period," Tasew said.

However, compared with the previous year (2021-2022) it showed a slight decline. Tasew attributes this to the decline in the global demand for air cargo transport.

In the year under review, Ethiopian generated a total of US\$6.12bn revenue, 21 percent up from the previous year. "We can say it was a successful financial year," Tasew said.

□□□□□

According to the CEO, the 2022-23 fiscal year was a year of recovery and growth for Ethiopian Airlines. "There were a number of challenges which happened in the industry that affected us. But we managed to successfully pass through them, recording a very good achievement," he said.

Hefty fuel expense was one of the major challenges the airline faced in the fiscal year. The price of jet fuel went through the roof. "The fuel price remained high. It showed a slight improvement, but it is still high and it constituted close to 40 percent of our total operating costs," Tasew said.

Shortage of spare parts is the other major challenge. In the aftermath of the Covid-19 pandemic, aircraft and engine manufacturers experienced a myriad of challenges in the supply chain that led to a shortage of parts and components. "It was a real challenge

**Continued on Page 14** ▶

▼ This is a very ambitious growth plan. ▲  
MESFIN TASEW



CONTINUED FROM PAGE 13

for the whole industry that has also affected us," Tasew said.

The other challenge is the declining demand for air cargo transport. Tasew said the demand for air cargo was declining consistently throughout the year.

Ethiopian also had adverse weather conditions at its hub airport, the Addis Ababa Bole International Airport, which forced it to divert its flights to other airports.

"Though we had all these challenges, we achieved most of our targets and in some areas we achieved more than our plan," Tasew commented.

Ethiopian added seven new international destinations to its network in the fiscal year. Atlanta, Zurich, Copenhagen, Aman, Chennai, Karachi, and Bulawayo are the new destinations the airline launched. "In addition we increased frequencies on our existing network. We were able to expand our network," Tasew said.

The management of Ethiopian has set clear targets it wants to achieve by the year 2035. The airline plans to expand its international network to 209 from the current 134 destinations. The expanded network requires a total fleet of 271 aircraft of different size and models. At the moment the airline operates 144 aircraft comprising 32 Bombardier Q400s, 29 Boeing B787s, 19 B777s, 43 B737s, one B767 and 20 Airbus A350s.

The airline has 26 aircraft on order – four Airbus A350-1000s, 17 Boeing B737 MAX8s and five B777Fs to be delivered in the coming two years. In the 2022-2023 budget year the airline took delivery of 12 brand new aircraft – two from Airbus and 10 from Boeing.



Ethiopian plans to transport more than 60m passengers and three million tons of cargo and to generate US \$25bn revenue by 2035. "This is a very ambitious growth plan," Tasew proudly said.

According to Tasew, fleet is one of the major pillars of the Vision 2035 growth strategy. "To achieve our growth plan we need to have a modern, fuel-efficient and fit-for-purpose fleet," he said.

Speaking of the Ethiopian widebody fleet, Tasew said the Airbus A350 and the Boeing B787 constitute the core fleet. For decades, Ethiopian operated only Boeing aircraft on its mid- and long-haul routes. But for the first time the airline introduced the first Airbus aircraft (A350s) into its fleet in June 2016.

"The A350-900s have been performing very well. They are very good aircraft. They have good ratability and comfortable cabins. Our passengers like them," Tasew said. Ethiopian is currently operating 20 A350-900s and will take delivery of four A350-1000s in the next two years.

The Boeing B787s are also part of the



**GROWTH PLAN:** Ethiopian aims to transport more than 60million passengers and 3million tons of cargo by 2035.

PICTURE CREDIT: XXXXXX

Ethiopian core fleet. Currently, the national carrier is operating 19 B787-8s and 10 B787-9s. Ethiopian was one of the launch customers of the B787s. It was the third airline next to Japan Airlines and All Nippon Airways to operate the Dreamliner aircraft.

At the beginning there were some technical glitches that made the Dreamliner difficult to operate. "Initially there were several challenges related to the reliability of its systems and components. But over the years those systems and components have matured and the 787 has turned out to be a reliable aircraft," Tasew said.

"The only issue that we have today is a shortage of the supply of spare parts on both the A350 and B787 fleets. We have very critical challenges with a few important components. It is a little bit more pronounced on the A350. "That is part of the global challenge with the supply chain of aircraft parts and components. It is related to the supply chain problems that occurred in the wake of the Covid pandemic," he added.

In the turboprop category, the Bombardier Q400 is Ethiopian's favourite aircraft. The airline operates 32 Q400s and its MRO centre is certified by Bombardier. "We use our Q400 fleet primarily to cover the domestic routes. We have an extensive domestic route operation in Ethiopia," Tasew said.

There are 22 asphalted airports in the country. "We use our Q400s extensively within Ethiopia, but we also used them to fly to short destinations like Juba, Khartoum, Entebbe, and Dar es Salaam in East Africa. But as the traffic has increased they have been replaced by Boeing 737s on the regional routes. Now we use the Q400s mostly on domestic routes but we also fly them to some cities in neighbouring Somalia," the CEO said.

Ethiopian has a bold plan to grow its fleet by acquiring 127 new aircraft by 2035. In the coming two to three years alone it will take delivery of 26 new aircraft – four A350-1000s, five B777Fs and 17 B737MAX8s.

"In addition, we are currently negotiating with

aircraft manufacturers to place orders for our aircraft requirements in the coming 7-8 years," Tasew said.

Ethiopian is phasing out its B767s, which constituted the core fleet before the introduction of the B787s to its fleet in 2012. It has converted two B767s into cargo at its own MRO centre. The two B767s have joined Ethiopian's freighter fleet and are supporting its cargo operation. The third B767 is also being converted to cargo. "We are considering whether to convert some of the B777s to cargo," Tasew said.

Ethiopian has 10 B777s (six B777-200LRs and four B777-300ERs) and nine B777Fs. "The B777-300ERs are leased and we will return them to the lessor in 2026-2027," Tasew said. "We will replace the ageing B777-200LRs with the B787 or A350. We will capitalise on the B787 and A350. We may also introduce the B777X into our fleet."



According to Tasew, his management team is evaluating the B777X and the A350-1000 in the 300-400 seat category.

In the regional jet category, Ethiopian is evaluating the Airbus A220 and Embraer E195. "Previously we had evaluated the 100-seater regional jets and we shortlisted two aircraft models, the Embraer E2 and the Airbus A220 as candidates.

"But due to several considerations we wanted to wait and deferred our decision on that category. When we finish our 300-400 seater aircraft evaluation we will again move to the 100-seater aircraft evaluation," Tasew said.

Regarding the turboprop fleet, Tasew said Ethiopian will keep the Q400s. "They are very good aircraft with commendable reliability and efficiency," he added.

"We will be adding more aircraft depending on the demand. Fleet renewal is a dynamic process. We will continuously adjust the number of aircraft to be phased into our operation depending on the demand which is constantly changing," he concluded. ▲



**WE ARE A DISTRIBUTOR, RESELLER AND STOCKIST OF WORLD-CLASS PRODUCTS IN CENTRAL & WEST AFRICA.**



**OVER 100 YEARS OF AIRCRAFT TYRE MANUFACTURE HISTORY WITH UNQUESTIONABLE RELIABILITY, QUALITY AND SAFETY RECORD.**



Over 60 years of providing proven specially formulated high performance aviation fluid, for commercial, business and military aircraft.



Cee-Bee delivers nose to tail tried and trusted routine aircraft cleaning, inspection & overhaul solutions.



**UK Office Address:**

**STARBURST AVIATION UK LIMITED**  
Brightwell Grange, Britwell Road, Burnham  
Buckinghamshire SL1 8DF, United Kingdom

**E-mail:** sales@starburstaviation.net  
**Website:** www.sbaviationltd.com

**West African Office Address:**

**AIRLINE MANAGEMENT SUPPORT LTD**  
125 Ogba Road, Ikeja Lagos Nigeria  
142 Oba Akran Ave, Ikeja Lagos Nigeria

**E-mail:** sales@amsaerotyres.com  
**Website:** www.amsaerotyres.com

ASA-100 ACCREDITED



State-owned Ibom Air is making a name for itself in the African market as a strongly-run Nigerian airline that is growing profitably with Airbus A220s soon to enter the fleet. **Mark Pilling** reports from Abuja.

# BUZZING IBOM



**C**redibility is a word that comes up a lot when talking to Ibom Air's George Uriesi, the managing director and chief operating officer of this start-up that is growing methodically from its base in Uyo in southern Nigeria.

For Uriesi, who helped found Ibom Air five year ago, it is vital his carrier's management team builds credibility with all its business counterparties. The airline's vision is to be "a world-class, African regional airline" that is executing a sensible business strategy and gaining a reputation as an African airline that is a reliable partner, paying its bills on time and in full.

*African Aerospace* interviewed Uriesi at the 7th Aviation Africa exhibition in Nigerian capital Abuja in mid-September as the airline prepared to take delivery of its first of 10 new Airbus A220s in November and embark on a new phase of growth.



The Ibom Air case offers a blueprint for the right way to set up an airline in Nigeria, and to a wider extent in Africa. The barriers to airline success are high in Nigeria, a country where costs are high, there is a volatile exchange rate of the naira to the US dollar, and the availability of critical foreign currency to pay overseas suppliers, especially aircraft lessors, is scarce.

According to Uriesi: "The uniquely 'Nigerian' issues can be overcome with deliberate, focused action and transparency. The management and organisational culture of an airline are important to building the confidence and buy-in of key

partners in the aircraft acquisition business."

Ibom Air is an unusual start-up. Uriesi's CEO, captain Mfon Udom, was tasked by the state government of Akwa Ibom to create a business plan for a regional airline. He immediately called Uriesi up and together they worked on the plan for the airline.

"The aim is for Ibom Air to be a major plank of the state government's economic strategy to diversify the state's economy and move it from government-dependent to private sector-led," said Uriesi.

"The vision of state governor Udom Emmanuel was to develop a successful, well-run carrier like Emirates," said Uriesi, who was invited to run the carrier after preparing the business plan.

Uriesi, whose CV includes stints at Procter & Gamble, South African Civil Aviation Authority, Airports Company of South Africa, and CEO of the Federal Airports Authority of Nigeria, was the credible leader to navigate all the trials of establishing this state-owned, but privately-managed airline in Nigeria and get Ibom airborne.

"The idea was to take all our experience and build this right first time and for all time," he said. "Pick the right people, have the right structure, choose the right aircraft, create the right vision, and mission and try to just lead it clean with very top-notch corporate governance. Let's see if this is possible to be done in Nigeria."

Ibom Air began operating on 7 June 2019 when a Bombardier CRJ900 took off from Uyo's Victor Attah International Airport en-route to Muritala Muhammed International Airport in Lagos.

The business plan envisaged Ibom Air to begin operations with five aircraft, but it settled on three CRJ900s to ensure it had enough working capital, said Uriesi. This turned out to be a blessing because the shutdown caused by the pandemic almost caused Ibom Air to stall.

A quick recovery of Nigeria's domestic air travel market helped revive Ibom Air from August 2020 and it has not looked back. From day one, the carrier was founded to be built as a safe, service-focused, and profitable, said Uriesi.



So far, building back from the Covid crisis, it has made the grade, carrying 2.5 million passengers by July 2023, undertaking nearly 35,000 scheduled flights safely up to the end of August, having the best schedule reliability and on-time performance in the country and it achieved IATA operational safety audit (IOSA) certification in March 2023.

Uriesi describes Ibom Air's operational platform as a tripod with the legs being the airline, its expanding MRO base (with the aim to be self-sufficient in six-eight years), and its home airport at Uyo, one of the fastest-growing airports in Nigeria.

Today, Ibom Air's exclusively domestic network is focused on Uyo and Lagos. However, a new terminal being built at Uyo for the carrier will see it increasingly create a transfer hub operation, said Uriesi. The carrier will also launch flights to neighbouring countries in Africa, but it will remain within the continent, he added.

Starting with the 90-seat CRJ900, which has



PICTURE: IBOM AIR

PICTURE: GEORGE URIESI

“The aim is for Ibom Air to be a major plank of the state government's economic strategy to diversify the state's economy and move it from government-dependent to private sector-led.”

GEORGE URIESI

from Egyptair for a time, giving the carrier a chance to "test" the aircraft, which was a great success, said Uriesi.

Today, Ibom Air's fleet consists of five CRJ900s, which it will retain, and two wet-leased A320s, which will be returned to the lessor in April 2024. The A320s have been added to boost Ibom Air's capacity while waiting for the A220s to arrive.

The airline will receive its first A220 from Airbus in November and is seeking at least one A220 and possibly two in addition to its delivery stream from the manufacturer to add capacity faster, said Uriesi. The second of its 10 A220s from Airbus arrives in November 2024.

The plan is for Ibom Air to move into its new Uyo terminal in Q4 and begin its new regional services, with routes launching over a six-month period to Douala, Cameroon; Accra, Ghana; Malabo, Equatorial Guinea; Libreville, Gabon; and São Tomé and Príncipe.



A side benefit of its overseas services will be an increase in foreign currency revenues, which will increase over time, helping Ibom Air generate cashflow in dollars. The carrier will also seek partnerships with other carriers in the markets it flies to and eventually look to join one of the global airline alliances, said Uriesi.

The carrier will carry more than a million passengers this year, and around 1.5 million are expected in 2024, said Uriesi. "We are growing fast, from a seven-aircraft operation to nine aircraft at the end of this year. We see ourselves as a 40 aircraft airline by 2028," he added.

A new administration in the Akwa Ibom state government recently took office and thankfully the change has kept the airline's mission unaltered. "The transition is done, and they continue to maintain the same level of independence as we had with the founding governor," said Uriesi.

At the operational level, Ibom Air is making money, although its financial information is private. Those that do see the books, like OEMs, bankers, lessors and suppliers, are impressed and want to do business with the airline.

These players are also impressed with the carrier's professional and confident approach as the management team establishes the credibility of Ibom Air on the international stage. ▲



## UNE LOGIQUE DE HUB POUR L'ALGÉRIE

Air Algérie investit dans de nouveaux avions pour soutenir sa stratégie d'expansion. L'objectif : faire de l'aéroport d'Alger- Houari-Boumédiène, un hub international et de correspondance. Un reportage d'Anuradha Deenapanray Chappard.

Air Algérie ambitionne de relier les aéroports africains, asiatiques et européens via la capitale Alger. Elle déploie son réseau vers de nouvelles destinations dans le monde. La reprise a eu lieu en août dernier avec l'ouverture de la route Alger-Lyon et Alger-Doha.

Le premier bilan de l'année 2023 est satisfaisant pour Amine Andaloussi, porte-parole d'Air Algérie. Le transporteur national a largement dépassé son niveau d'avant la crise du Covid-19. « Nous avons rouvert nos routes vers l'Afrique (Sénégal, Burkina Faso, Mauritanie, Mali) avec plusieurs fréquences hebdomadaires. Cela a permis à notre nouvelle clientèle de faire le transfert en Europe et en Amérique du Nord via le réseau d'Air Algérie », dit-il.

Air Algérie est à la conquête de nouvelles opportunités de développement, en accord avec la recommandation du chef de l'état algérien d'ancrer la compagnie dans les marchés émergents.

Elle a récemment ouvert une route vers Saint Pétersbourg après Moscou pour renforcer sa présence dans la région.



Amine Andaloussi a également annoncé à African Aerospace l'ouverture d'une nouvelle ligne vers Johannesburg, une connexion entre les deux portes de l'Afrique. Le premier vol commercial était prévu pour le 21 septembre.

Les indicateurs sont donc au vert. Air Algérie est confrontée à une forte demande. D'où la volonté de l'état algérien d'acquiescer de nouveaux avions de consolider sa flotte comprenant 56 avions (Airbus, Boeing et ATR). La dernière acquisition remonte à 2016.

### SUMMARY

#### EXPANSION BOOSTS ALGERIA'S HUB CAPITAL

Air Algérie is investing in new aircraft to support its expansion strategy with the objective of developing the capital city's airport – Algiers-Houari-Boumediene – into an international and national hub.

Air Algérie aims to connect African, Asian and European airports via the capital Algiers and to this end it's developing its network to new destinations around the world, with the first additions being the opening of routes between Algiers and Lyon and Algiers to Doha, both in August.

A first look at progress so far in 2023 is 'satisfactory', according to Amine Andaloussi, spokesperson for Air Algérie. "We have reopened our pre-pandemic routes to Africa (Senegal, Burkina Faso, Mauritania and Mali) with several weekly flights, allowing our customers to transfer to Europe and North America via the Air Algérie network," he explained.

Air Algérie is seeking new development opportunities, fulfilling the intentions of the

Algerian government to anchor the airline in emerging markets – and to this end it recently opened a route to Saint Petersburg.

Amine Andaloussi also announced the opening of a new route to Johannesburg, forming a connection between two major 'gates' of Africa. The first commercial flight was scheduled for 21 September this year.

Air Algérie is facing strong demand, hence the desire of the Algerian state to acquire new aircraft to consolidate a fleet that currently comprises 56 aircraft, all from Airbus, Boeing and ATR.

Air Algérie will acquire 25 new airliners, according to Amine Andaloussi, with a first order of 14 aircraft, seven each from Airbus and Boeing. So far it has ordered five A330-900s and two A350-1000s and also confirmed the acquisition of eight B737 MAX 9s at the last Paris air show with the first deliveries will taking place in early 2025. A 'request for proposal' has also been issued for six A330s and four B737s.



An A330-200 Air Algérie msn1613 taxiing. PICTURE: ALEXANDRE DOUMENJOU - MASTER FILMS

Inset: Amine Andaloussi: "We have reopened our pre-pandemic routes to Africa." PICTURE: AIR ALGÉRIE

Air Algérie va acquiescer 25 nouveaux avions malgré un marché en forte tension selon Amine Andaloussi, avec une première commande de 14 avions (7 Airbus et 7 Boeing). Elle a commandé cinq A330-900 et deux A350-1000 en juin dernier et a confirmé l'acquisition de 8 B737 MAX 9 au dernier salon de Paris-Le Bourget. La première livraison aura lieu début 2025.

Une Request For Proposal (RFP) portant sur six A330 et quatre B737 est en cours pour moderniser la flotte.



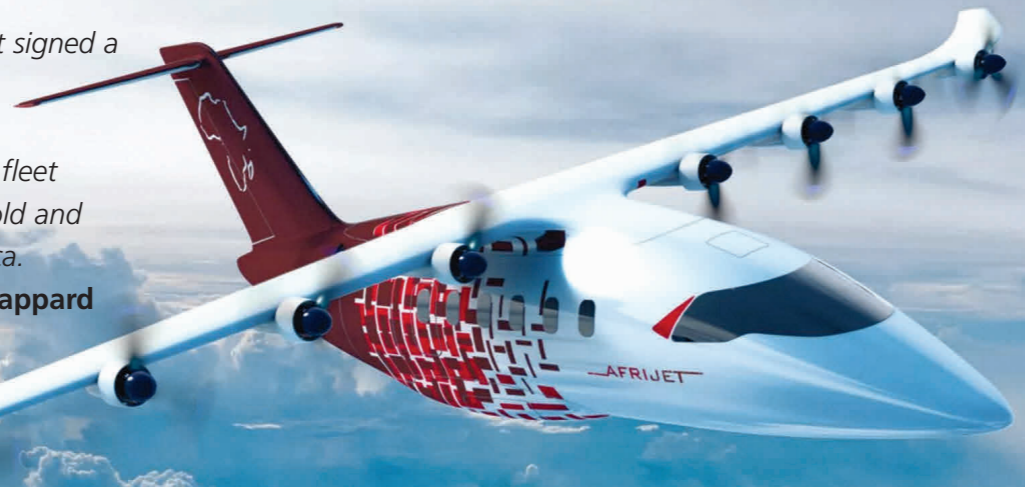
La stratégie d'expansion d'Air Algérie s'appuie sur son projet de hub et de correspondance de l'aéroport d'Alger. Pour Amine Andaloussi, la compagnie dispose de nombreux atouts grâce à son positionnement et un vaste territoire de 2 millions de km<sup>2</sup>. Air Algérie dessert 33 aéroports à travers le pays, représentant plus 88 étapes journalières. Elle propose plus de 300 vols vers l'Europe avec une fréquence considérable et de 200 connexions par semaine vers la France à partir de Marseille, Metz, Montpellier, Paris et Toulouse. La compagnie offre ainsi à sa clientèle et en particulier africaine une forte capacité de transit.

La compagnie intensifie ses activités sur le marché international et domestique, en capitalisant sur ses atouts pour répondre aux attentes grandissantes et aux exigences en matière de qualité des services. Elle développe ainsi des partenariats et des partages de codes.

Alger se situe à seulement 50 minutes de l'Europe et son aéroport est prêt à accueillir les voyageurs en transit avec une capacité de 15 millions de passagers.

Il faudra donc composer avec cet acteur majeur dans le futur.

Gabonese hybrid airline Afrijet signed a financing agreement with BGFIBank Gabon and BDEAC last February to modernise its fleet while strengthening its foothold and expanding its network in Africa. **Anuradha Deenapanray Chappard reports.**



# Afrijet embarks on a new ERA

The initiative of the Gabonese private airline is part of the company's strategy to meet the strong demand of its customers in Africa.

This includes both its historical markets, like South Africa, and emerging markets, such as mining, oil and natural gas exporters in Nigeria.

Marc Gaffajoli, CEO of Afrijet, said: "We want to set up new services in Kinshasa in the DRC, Lagos and Port Harcourt in Nigeria, Dakar in Senegal and Johannesburg in South Africa."

The airline recently announced the lease acquisition of a Bombardier CRJ-900 to support air traffic to and from Congo-Brazzaville and Benin.

Gaffajoli told *African Aerospace* that 2023 is the airline's "best year" since its inception in 2004, with a return to growth surpassing 2019's revenue level by 20% and two exceptional quarters in non-recurring charter activities.

He added that the \$13 million fundraising from regional public banks will enable Afrijet to implement its 2022-26 development plan by enlarging its network, digitising its services and modernising its fleet. It will also help the company to acquire a stock of spare parts and maintenance tools.

The airline's fleet consists of six aircraft: two Falcon 900s for charter flights and VIP services as well as two ATR42-500s and two ATR72-500s. Two ATR72s will be in service by September.

Rooted in one of the 10 countries with a net carbon-absorbing footprint, Afrijet pursues its commitment to decarbonise its activities and promote a sustainable regional aviation. It signed a letter of intent with Aura Aero, a French manufacturer pioneer in low-carbon aviation, with respect to the electric regional aircraft (ERA) at the last Paris Air Show. This will be a first in Africa and another landmark for Afrijet.

Thanks to its versatility, the ERA will be able to carry up to 19 passengers (or 1.9 tons of cargo) and has a range of 1,600 km. It can also be configured for business aviation to accommodate eight or nine passengers. The aircraft will be able to land both at international airfields and on short or unprepared runways. The first flight test is scheduled for 2026.

For Marc Gaffajoli, the ERA is "a realistic and mature project". He says that it is the "best technological



**Marc Gaffajoli: 2023 is Afrijet's 'best year' since its inception in 2004.**

PICTURE: AFRIJET

**SOMMAIRE**

## UNE NOUVELLE ÈRE S'OUVRE À AFRIJET

La compagnie hybride gabonaise Afrijet a signé un accord en février dernier avec BGFIBank Gabon et la BDEAC sur le financement d'un prêt pour renforcer son ancrage et élargir son réseau en Afrique.

Cette initiative montre la volonté de la compagnie de répondre à la forte demande de sa clientèle en Afrique, que ce soit dans ses marchés historiques, comme l'Afrique du Sud et les marchés émergents exportateurs de produits pétroliers et gaziers.

Afrijet a d'ailleurs annoncé l'acquisition en leasing d'un CRJ-900 pour soutenir le trafic aérien en provenance et à destination du Congo-Brazzaville et du Bénin. Elle proposera de nouvelles dessertes dont Kinshasa, Lagos et Port Harcourt au Nigeria, Dakar au Sénégal et Johannesburg en Afrique du Sud.

Selon le directeur général, Marc Gaffajoli, 2023 est la « meilleure année » de la compagnie depuis sa création en 2004, avec un retour à la croissance surpassant le chiffre d'affaires de

compromise" and will meet the needs of the market, evolving on the development curve in several segments including medical evacuation.

The ERA will also be instrumental in grafting African air transport onto the global decarbonisation roadmap and consolidating Afrijet's network sustainably on the continent, especially on mid-size regional routes.

According to its manufacturers, the aircraft will require little maintenance and offer around 80% reduction in CO2 emissions compared with traditional regional jets. In addition, it will enhance passenger comfort, with quieter engines and a modern pressurised cabin.

Afrijet's future development strategy consists in establishing investment projects and partnerships as well as strategic alliances with other African states and regions. The airline is also ready "to clone" and export its business model to underserved or remote areas to develop intra-African connectivity.

2019 de 20% et deux trimestres exceptionnels concernant les activités non récurrentes liées aux vols charter.

La levée de fond de 13 millions de dollars réalisée auprès des banques publiques régionales permettra à la compagnie de mettre en place son plan de développement 2022-26 pour parachever son réseau, digitaliser ses services et moderniser sa flotte.

Afrijet a signé une intention d'achat d'un avion régional à propulsion hybride électrique (ERA) avec AURA AERO au dernier salon du Bourget. Ce sera une première en Afrique.

Le projet ERA sera déterminant pour greffer le transport aérien africain sur la feuille de route de décarbonation de l'aviation mondiale et consolider le maillage d'Afrijet sur le continent.

Afrijet souhaite nouer des projets d'investissements et de partenariat, former des alliances stratégiques et exporter voire « cloner » son modèle dans d'autres états et régions d'Afrique.



# QUALITY GSE AT THE BEST PRICE

- + 3000 GSE on stock
- Well-known GSE brands
- Repair & Maintenance
- Refurbished GSE
- Technical advice
- Consultancy
- On-site technical support & training
- Spare parts



**80+**  
WORKSHOPS

**180+**  
AIRPORTS

**1000+**  
TECHNICIANS

## TCR'S REFURBISHMENT LEVELS

	STANDARD	PREMIUM
Unit fully operational and safe to use	✓	✓
Greasing, oil and filter changing	✓	✓
Function test on gearbox, engine & electrical system	✓	✓
New battery, tyres and brake pads	ON REQUEST	✓
3 months warranty on spare parts	ON REQUEST	✓
Exterior and cabin painting	ON REQUEST	✓
New hoses	ON REQUEST	ON REQUEST



**NEED MORE INFO?**

**Nicolas Cowez** SALES MANAGER  
TEL +32 479 180 741  
nicolas.cowez@tcr-group.com

**WWW.GSEFORSALE.AERO**

# LE RÔLE CLÉ DE ROYAL AIR MAROC DANS LA STRATÉGIE TOURISTIQUE

Le PDG de Royal Air Maroc (RAM) Abdelhamid Addou a annoncé en juillet dernier la signature d'un contrat-programme 2023-2037 avec les autorités marocaines pour soutenir sa future stratégie de développement et de transformation en droit fil avec la vision du

Royaume. Des détails avec Anuradha Deenapanray Chappard.

**Abdelhamid Addou:** La compagnie nationale marocaine souhaite changer de dimension.  
PICTURE: ROYAL AIR MAROC



La signature de cet accord fut un moment historique pour Royal Air Maroc (RAM), 65 ans après sa création selon son PDG, Abdelhamid Addou. Au-delà de sa volonté de quadrupler sa flotte d'ici la fin de la prochaine décennie, la compagnie nationale marocaine souhaite changer de dimension. D'où, l'élaboration et la mise en place de ce contrat-programme avec le soutien des autorités marocaines dans une approche participative et pragmatique.

Pour Aziz Akhannouch, chef du gouvernement marocain, la participation de l'État dans le capital de la RAM « sera renforcée dans le cadre de l'accompagnement par le gouvernement d'un projet d'investissement de grande envergure de la compagnie, de la mise en œuvre de son plan de développement, du soutien à sa compétitivité et de la digitalisation et l'amélioration de la qualité de ses services ».

Royal Air Maroc est un acteur incontournable pour développer des liaisons aériennes accompagnant la feuille de route stratégique du secteur du tourisme. Cette politique vise aussi à attirer des

investissements et des entreprises pour consolider, diversifier et moderniser le tissu industriel du pays.

Dévoiant les contours et les vecteurs de sa stratégie de développement, Abdelhamid Addou a affirmé que la compagnie nationale compte intégrer de nouveaux avions dans sa flotte dès 2024. Elle va en effet passer de 50 appareils actuellement à 200 appareils au cours des 15 prochaines années.

Une « Request For Proposal » (RFP) a été lancée voici plusieurs mois pour une commande de 10 avions. Les discussions ont abouti le 16 août dernier avec l'annonce d'un contrat avec Air Lease Corporation qui comprend la location de quatre Boeing 737 MAX 8 et d'un Boeing 737-800.

La livraison des avions est prévue à partir de la mi-2024 et font partie intégrante du carnet de commandes d'ALC auprès de Boeing. Royal Air Maroc avait déjà deux Boeing 737 MAX dans sa flotte en 2019 et devait en réceptionner deux autres. La flotte de Boeing 737 MAX a dû être ensuite immobilisée à la suite des accidents de Lion Air et d'Ethiopian Airlines.



Selon les informations données à la presse, une négociation est en cours avec Boeing pour une commande de Boeing 787-8 Dreamliner. Un nouvel appel d'offres sera lancé d'ici fin 2023 pour une commande plus importante d'avions en achat ou en leasing auprès de plusieurs avionneurs.

D'ici 2037, RAM souhaite transporter 31,6 millions de passagers contre 7,6 millions aujourd'hui et prévoit un chiffre d'affaires de 94 milliards de dirhams. Ses effectifs devraient également passer de 3 500 à 11 000 salariés.

RAM va également densifier son réseau et passer de 99 à 143 destinations. La compagnie nationale compte ouvrir de nouvelles routes à l'international à partir de Casablanca et de ses bases dans le pays. Elle vise le marché africain, américain et asiatique. La compagnie souhaite mettre en place 46 dessertes domestiques au départ des petites et moyennes villes pour promouvoir le tourisme sur l'ensemble du Royaume. Ainsi, les voyageurs ne seront pas obligés de transiter uniquement par Casablanca.

« Notre objectif est également de renforcer les liens entre la communauté marocaine établie à l'étranger et le Maroc, de mieux connecter les villes et de désenclaver un ensemble de régions

LIVING THE DREAM: Negotiations are already underway with Boeing to order Boeing 787-8 Dreamliners.  
PICTURE: RAM



dans le Royaume à travers le renforcement des liaisons aériennes domestiques », souligne Abdelhamid Addou.

Royal Air Maroc développe également des partenariats pour pérenniser son développement. Elle dispose d'un accord de partage de codes (code share) avec Emirates, offrant plus de possibilités de voyages et de choix de connexions aériennes aux clients sur leurs vols Dubaï - Casablanca, de même que vers d'autres destinations. Elle profite également de son adhésion à l'alliance aérienne Oneworld, passant d'un réseau d'une centaine de connexions de ses bases au Maroc à plus de mille au niveau mondial.



Autre fait marquant, la compagnie marocaine est devenue la première compagnie africaine certifiée Cargo iQ. Elle est en conformité avec les normes de gestion de la qualité de l'industrie du transport de fret aérien. Elle rejoint ainsi les acteurs majeurs de la chaîne logistique (dont des transitaires) et de fournisseurs de solutions informatiques au niveau mondial.

In fine, le contrat-programme 2023-2037 vise à renforcer le rôle de hub aérien de l'aéroport international de Casablanca, la capitale économique du Royaume. Il s'agit aussi de consolider son statut de plateforme de correspondance internationale positionnant l'aéroport « dans le top 3 en Afrique en termes de trafic et de connectivité ».

Grâce à cette courbe de transformation constante et réussie, la RAM est appelée à jouer un rôle déterminant dans le développement futur du Maroc, montrant par là même que la libéralisation de l'espace aérien peut être un levier de croissance durable. ▲

## SUMMARY

### ROYAL AIR MAROC'S KEY ROLE IN TOURISM STRATEGY

The CEO of Royal Air Maroc, Abdelhamid Addou, has signed an historic 25-year 'future development' agreement with the North African kingdom's government intending to result in a quadrupling of the airline's fleet by the end of the next decade. The agreement, signed in July this year, extends until 2037.

(The agreement was signed a couple of months before early September's devastating earthquake that caused such colossal damage to towns, villages and infrastructure – and consequent loss of life – in the inaccessible Atlas Mountains' region of the country. African Aerospace extends its condolences and sympathies to all those affected.)

At the signing ceremony, Moroccan prime minister Aziz Akhannouch, said that the state's investment in Royal Air Maroc would be strengthened as part of the government's support for the airline: To ensure the implementation of its development plan; to support its competitiveness; and to enhance both digitalisation and the improvement of service quality.

The Moroccan government regards Royal Air Maroc as a key player in developing international air routes to support the country's strategic tourism roadmap. This policy also aims to attract investments and businesses that will consolidate, diversify and modernise the country's industrial fabric.

Revealing the outlines and concepts of its development strategy, Abdelhamid Addou affirmed that the national company intends to integrate new aircraft into its fleet from 2024, resulting in an increase of its current 50-strong fleet to around 200 aircraft over the coming quarter of a century.

Subsequently, a 'request for proposal' (RFP) was launched for 10 aircraft and this culminated on 16 August with the announcement of a contract with Air Lease Corporation that includes the leasing of four Boeing 737 MAX 8s and one Boeing 737-800.

Delivery of these aircraft is scheduled from mid-2024 and is an integral part of ALC's order book with Boeing. Royal Air Maroc already had two Boeing 737 MAXs in its fleet – and was due to receive two more – but this introduction was affected by the two much-publicised accidents in Africa and the Far East that resulted in the type being temporarily grounded.

According to recent news releases, negotiations are already underway with Boeing to order Boeing 787-8 Dreamliners while a new tender will be issued by the end of this year for a larger order of aircraft – purchase and/or lease – from a variety of OEMs.



By 2037, RAM intends to be transporting 31.6 million passengers each year compared with an annual total of 7.6 million today and it forecasts an annual turnover of 94-billion Dirhams (US\$9.2bn). Its workforce is also targeted to increase from 3,500 to 11,000 employees.

RAM will also enhance its network and increase from 99 to 143 destinations, opening new international routes from Casablanca and its other bases in the country, targeting African, American and Asian markets.

The company also intends to set up 46 domestic services from small and medium-sized towns to promote tourism throughout the Kingdom, meaning that domestic passengers will no longer be forced to transit through Casablanca.

Royal Air Maroc's code share agreement with Emirates is another growing passenger benefit as is the airline's membership of the Oneworld alliance.

"Our objective is also to strengthen the links between the Moroccan diaspora and their home country, connect more cities and open up many isolated regions in the Kingdom through enhanced domestic air links," concluded Abdelhamid Addou. ▲



## Unlock Your Potential: Soar to New Heights with alt.academy's Premier Pilot Training

Are you ready to take your aviation career to the next level? Look no further than alt.academy, the leading provider of Boeing 737 and Airbus A320 type rating training for flight deck crew within Southern Africa, and Africa, with a Global footprint in India and Pakistan. Whether you're an aspiring pilot or a seasoned professional aiming to advance your career, our comprehensive programs are designed to equip you with the skills and knowledge necessary to succeed in the dynamic world of aviation.

### A TRUSTED NAME IN AVIATION EDUCATION

With over 15 years of industry experience, alt.academy has recently undergone an exciting rebranding to reflect our unwavering commitment to excellence. Our highly experienced instructors, who have flown for some of the most prestigious airlines renowned for their safety and standards, are dedicated to nurturing our students and empowering them to reach their full potential. We prioritize integrity and respect, fostering an environment where every student feels supported and confident in the skills they acquire during their training with us.

### COMPREHENSIVE TRAINING UNDER ONE ROOF

At alt.academy, we understand the importance of convenience and efficiency in your training journey. That's why we offer a full turnkey training academy that covers all aspects of your pilot training, from theory to practical sessions. Our state-of-the-art facility operates 24/7, ensuring a seamless training experience for our students. With an impressive maintenance team, we maintain an exceptional uptime of over 90%, guaranteeing uninterrupted access to our cutting-edge training devices.

### STATE-OF-THE-ART SIMULATOR HOUSING FACILITIES IN SOUTH AFRICA


Looking for a reliable and convenient location to house your training devices in South Africa? Look no further! At


alt.academy we offer premium simulator housing facilities that cater to operators seeking a dedicated space to support their training needs. Our turnkey simulator housing solutions provide operators with the ideal environment to maximize their training efficiency. Whether you require space for Boeing, Airbus, or other aircraft simulators, we have the infrastructure and expertise to meet your requirements. Our state-of-the-art facilities are designed to accommodate a range of simulator devices, ensuring a seamless and immersive training experience for your crew.


### IGNITE YOUR AVIATION CAREER TODAY


Are you ready to embark on an exhilarating journey toward becoming a certified Boeing 737 or Airbus A320 pilot? Visit our website or contact us today to explore how alt.academy can support your aspirations. Our dedicated team is here to answer your inquiries and guide you through our comprehensive instruction and training offerings. Let us be your partner in reaching new altitudes of success in the aviation industry.

### UNLOCK YOUR POTENTIAL. CHOOSE ALT.ACADEMY TODAY.

 +27 87 470 0202

 [enquiries@altacademy.com](mailto:enquiries@altacademy.com)

 Fortress St & Whirlwind St,  
Rhodesfield  
Kempton Park, 1619  
South Africa

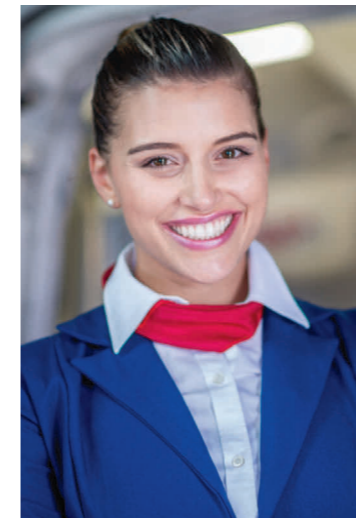
 [www.altacademy.com](http://www.altacademy.com)



ATO NO:  
SACAA/1029/ATO



## Empowering People Together



### Specializing in: Cabin Crew & Ground Personnel Training

## Your opportunity to pursue a CAREER IN AVIATION

EPT Aviation Training vehemently believes that any industry is only as good as the next generation of dreamers, achievers and high flyers that it produces. Which is why, as an approved SACAA Aviation Training Organisation, we see beyond just qualifications and certifications, but have dedicated ourselves to developing, nurturing and inspiring the next generation of leaders.

Learners seek results, new skills and knowledge, a change in their life and most of all hope for a better future. Our learning programmes guide and enable Learners to achieve this. We don't sell a product or service but rather we provide a solution to our Learners. We ensure that our Learners graduate feeling a sense of winning and a significant amount of progress. We empower our Learners to improve themselves, become more employable, make a positive change in their own lives and that of their families, and make a significant difference in the workplace and society at large.

We fully understand that learning can be tough, especially when qualifying for a new job/career in the aviation industry that has its own unique language, terminologies and culture. Hence, our learning programmes are designed to keep Learners motivated to continue to learn, even after they have completed their studies. We strongly believe that learning is a life-long process and not just a course to be completed.

### We empower today's dreamers to become tomorrow's leaders.

#### Our Contact Details:

Cnr Fortress Street & Whirlwind Street, Rhodesfield, Kempton Park, Johannesburg, SOUTH AFRICA  
Tel/WhatsApp: +27 72 149 5997 | Email: [info@eptaviation.com](mailto:info@eptaviation.com) | Web: [www.eptaviation.com](http://www.eptaviation.com)

Angola's flag carrier TAAG may go into the black for the first time in its history in 2022, but it is struggling to expand and update its fleet, Eduardo Fairen Soria, chief executive of TAAG Angola Airlines told **Mark Pilling** on the sidelines of the IATA AGM in Istanbul in early June.

## Profitable TAAG suffers growing pains

Luanda-based TAAG is not now expecting to take the first five of six Airbus A220s this year, but will only start taking delivery in April 2024 at the earliest, a significant delay, said Soria.

The carrier announced a deal to lease six A220s from Air Lease Corporation at the Farnborough Air Show in 2022.

ALC is expected to deliver four A220s in 2024 and the final two in 2025, he said. Like all airlines and lessors, ALC is suffering from production delays by the major OEMs as they struggle with supply chain issues to deliver aircraft on time.

TAAG is currently operating 23 aircraft, with 21 owned and two Airbus A330s wet-leased from Portugal's Hi Fly to support its Luanda to Lisbon route. The A330s are contracted to remain with TAAG until September, but may be extended depending on TAAG's ability to find more capacity.

"Beyond that we have still not taken a decision because we are still working heavily to recover the whole fleet," said Soria, with a lack of spare parts and logistical issues meaning that bringing back its entire fleet of Boeing 737s and 777s is taking longer than expected.

□□□□□

The intention had been to replace TAAG's six Boeing 737-700s with the A220, but the carrier is considering a retrofit programme to refresh the 737 fleet, in addition to refurbishing its five 777-300s, said Soria.

"We need them [737s] to be in service for longer because, with the delays on the deliveries of the A220s, we need more narrowbodies," he explained. It is seeking to add a further three 737NGs imminently on short dry leases and will possibly add another two at year-end if the A220 delays continue.

As it struggles with its narrowbody needs, TAAG has a widebody requirement too. "We are in negotiations with Airbus and Boeing for the replacement of the widebody fleet," said Soria. It has eight widebodies in its fleet today, although its three 777-200s, which had been operating in passenger to cargo (PTC) configuration, are grounded.

It is looking for 10 new widebodies, he said. Asked about his delivery timeline Soria joked: "Ask them. Honestly, I don't know, and that's the problem nobody knows. Not only the delivery time but also the price."

Soria, who has extensive management experience in African, European, and Latin American carriers, and his team have steered TAAG to its first profit in 80 years of operation.

This remarkable feat has been achieved by a



combination of significant cost reduction and a doubling in revenue flying, said Soria, although its passenger numbers were only 65% of its 2019 level. It made a 460 million kwanzas (US\$800,000) operating profit in 2022.

It will be a challenge to sustain this performance in 2023, explained Soria. "This year is different because we want to enlarge the fleet and we are having restrictions."

"We still don't have a solution for our cargo fleet [777-200s]," he said. "We operated three cargo aircraft in passenger to cargo (PTC) configuration last year, which was very profitable."

"Due to changes in the policies of FAA and EASA, that were driven more by economic terms than operational terms, our civil aviation grounded those aircraft in December," said Soria. TAAG is negotiating with its authorities to see what the alternatives are to get them back into service. ▲

▼ We want to enlarge the fleet and we are having restrictions. ▲  
EDUARDO FAIREN SORIA



Providing end to end ACMI solutions worldwide

Chapman Freeborn is exceptionally placed to provide capacity for all aircraft leasing needs to airlines worldwide through our dedicated inter-airline ACMI leasing division.

Whether you require a last minute ACMI sub charter or are seeking additional lift to fulfil peak season demand, our experienced team of experts offer a wide scope of options for airlines looking for ACMI solutions.

Find out more: [chapmanfreeborn.aero](http://chapmanfreeborn.aero)



# Kigali's cargo hub a regional boost

RwandAir and its partner, Qatar Airways, believe that the African airline's new cargo hub will help improve trade throughout the continent. Alan Dron reports.

**K**igali International Airport is setting itself up as a major cargo hub to improve freight shipments throughout Africa.

A new cargo facility in the Rwandan capital will become a transit centre for loads entering Africa from overseas – particularly China – that will then be moved around the continent.

"Rwanda's geographic position at the heart of Africa has put us in a unique position to reach every corner of the continent and strengthen our relationship with countries both within Africa and around the world," RwandAir's CEO, Yvonne Manzi Makolo said.

She was speaking following the arrival of the first Qatar Airways Boeing 777F freighter at the new cargo centre.

"As a landlocked nation, we recognise the importance of air freight in not only Rwanda's economic route, but also across the continent," she added. "Africa is home to a hugely-diverse economy, with businesses and entrepreneurs

looking for better connections to create new markets and expand inward investment."

This added emphasis on cargo operations was underlined last November, when RwandAir took delivery of its first dedicated freighter, a Boeing 737-800SF.

RwandAir is operating the aircraft to several destinations in Africa and the Middle East, including Johannesburg, Nairobi, and the UAE.



The cargo hub development marks the latest step in RwandAir's increasing co-operation with Qatar Airways.

The cargo warehouse is almost 4,900m<sup>2</sup> in size, with an approximate annual handling capacity of 49,000 tonnes. The facility has 16 dedicated cool positions, segregated for fresh food and pharmaceuticals

"During close collaboration between Qatar

Airways and RwandAir, QAS Cargo provided consultancy support to RwandAir Cargo to improve its cargo handling performance at the existing facility for the Kigali cargo hub launch," explained Elisabeth Oudkerk, Qatar Airways' SVP cargo sales and network planning.

"Expert teams from QAS Cargo visited the cargo handling facilities in November 2022 and provided RwandAir management with a detailed action plan for operational improvements.

"This was followed by an intensive four-week onsite engagement by a team of five QAS Cargo subject matter expert staff. This team was instrumental in ensuring ground-level implementation of the suggested improvements in RwandAir Cargo's handling performance."

Qatar Airways is operating a twice-weekly Doha-Kigali cargo service with a Boeing 777 freighter and "Since March, we have launched an inland African cargo service connecting the cities of Kigali and Lagos, Nigeria, with two flights



RwandAir CEO Yvonne Manzi Makolo and Qatar Airways' CEO, Guillaume Halleux (centre, at bottom of airstairs) were on hand for the first arrival of a Qatar Airways Boeing 777F at the new Kigali cargo hub.

PICTURE: QATAR AIRWAYS

Kigali-Lagos-Kano-Kigali route (weekly) and a Kigali-Nairobi-Doha service (weekly).

The A310 is operated by Qatar Airways Cargo and Rwandair, wet-leased from Turkish freight operator ULS Airlines Cargo.

"Africa is one of the world's fastest-growing economies, yet for it to develop to its full potential requires investment in logistics infrastructures," said Guillaume Halleux, chief officer, cargo at Qatar Airways. "It was therefore a logical step that Qatar Airways Cargo supports RwandAir in its cargo ambitions. Our customers will benefit from both a reliable intra-African network through our Kigali hub, as well as enhanced service levels and cost synergies."

The launch of Qatar Airways Cargo's first cargo hub outside Qatar aims to create a foundation on which to expand an African air cargo network to meet the 3%-5% annual economic growth forecast for the continent over the next decade. ▲

per week," said Oudkerk.

"We also launched a weekly cargo service from Doha to Kigali via Istanbul, operated by an Airbus A310 and in June, we added one weekly flight to Kano, Nigeria, as a part of the intra-Africa service from Kigali. In July, the Kigali hub network continued its expansion with an

addition of two weekly flights to Johannesburg on an A310. We expect more cargo services to be added out of Kigali in the upcoming months."

As of September, a leased A310 has been deployed at Kigali; this will operate several services connecting Kigali with Johannesburg (twice weekly), Lagos (weekly), a triangular



**AVIACO BECOMES GREEN!**  
FOR A SUSTAINABLE IMPROVEMENT

## YOUR SUPPLIER FOR USED REFURBISHED GSE AND RENTAL SOLUTIONS

Aviaco, your best choice to meet all your GSE requirements.

Danny Vranckx | CEO  
Tel. +32 471 942 780  
danny@aviaco-gse.com

Bart Kroonenberg | COO  
Tel. +31 653 765 332  
bart@aviaco-gse.com



www.aviaco-gse.com  
info@aviaco-gse.com



- 🛒 Sales and Purchase
- 🚛 GSE Rental Solutions
- 🚚 Fleet Management
- 🔧 Repair & Maintenance
- ⚙️ Value-added Services
- 🔋 GSE Electric conversion →



Proud member of **AFRAA**

## Digitalizing engine services



The future of engine services is digital. As a global leader for customized solutions for aero engines, MTU Maintenance continues to pioneer new technology. Our growing portfolio consists of a number of digital services, including our highly-advanced maintenance costing and planning tool, CORTEX. Our engine experts' know-how and artificial intelligence allow for tailored, data-driven decision making. As a result, you benefit from optimized, cost-effective maintenance strategies that fit your needs.

Contact us and find your solution today.

www.mtu.de/en





# WORLD DEFENSE SHOW

SAUDI ARABIA  
4-8 FEB 2024

FOUNDED BY

الهيئة العامة  
للصناعات العسكرية  
General Authority  
for Military Industries



# GET EQUIPPED FOR TOMORROW

World Defense Show 2024 is your destination to connect, collaborate and network with industry leaders and shape the future of security and defense. Get equipped for tomorrow and take part in this unmissable show.



SCAN TO REGISTER TODAY

MAIN PARTNER

وزارة الدفاع  
MINISTRY OF DEFENSE



NATIONAL STRATEGIC PARTNER

SAMI





The annual Aviation Africa Summit and Exhibition took place in West Africa for the first time as the region's plans for

the future take positive steps. Reporting by **Chloe Greenbank, Ella Nethersole, Mark Pilling and Alan Peaford.**

**A**buja's International Convention Centre (ICC) has seen better days, and like a fair amount of Nigeria's infrastructure, has suffered from a lack of investment.

But when it opened its doors in September for the Aviation Africa Summit and Exhibition, the whole place lit up with beaming smiles as more than 1,500 delegates from 75 countries descended to the venue to share ideas – and call for action – on the key issues affecting aviation across the continent.

This was the first time the region's premier aviation leadership event had been held in West Africa. Hosted by the Nigerian Civil Aviation Authority (NCAA) and Times Aerospace Events, it brought numerous companies and individuals to Nigeria for the first time.

Any concerns they may have had ahead of time were assuaged on arrival in the Nigerian capital, with the only complaint being the difficulty to get to the city from other destinations in Africa.

"That is the whole point" said the chairman and CEO of the region's largest carrier Air Peace, Allen Onyema. "We have the capacity to grow connectivity. We have the capability. We just need a level playing ground to access the routes and give the people the air transport system they deserve."



More than 100 exhibiting companies covering a whole range of services, manufacturing and support businesses were in attendance, reporting high-level visitors and genuine interest.

And no wonder, with dozens of airline C-suite leaders, directors general of civil aviation authorities across Africa and government ministers and their delegations from all corners of the continent were there. And all eager to see progress in accessibility, sustainability, reliability and profitability.

Symposia on business aviation; maintenance, repair and overhaul (MRO); and air finance allowed deeper scrutiny on the challenge and opportunity in the sectors. The growing importance of the show was demonstrated by a number of real orders and agreements signed at the show.

Air Peace was the biggest with an almost \$300m deal for five Embraer E175 regional jets and options on five more. The final details on the order had concluded at 02:00hrs in the morning and the Air Peace founder was on stage eight hours later with Embraer executives and the new Nigerian minister of aviation and aerospace development, Festus Keyamo and the



## PEACE...AND UNDERSTANDING

NCAA director general Capt. Musa Nuhu, to sign the contract.

There was delight all round for Embraer from the West African carriers as Overland Airways managing director Capt. Edward Boyo also revealed to a packed congress hall that the Nigerian airline had taken delivery of its first regional jet.

The 20-year-old airline said it received the first of three new E175 jets at a ceremony in Brazil. It also holds options for three additional aircraft.



The new aircraft will supplement the airline's current all-turboprop fleet and, "expand our reach and network," Capt. Boyo said. Overland operates both scheduled and charter flights, and plans to use the dual-class 88-seat E175s to increase capacity on domestic routes and expand services to regional cities.

A third Nigerian airline, start-up United Nigeria, which started operations in 2021, continued 'negotiations' with Embraer during Aviation Africa having recently ordered 10 E170 aircraft from the manufacturer and confirmed at the show

**Show stoppers:** Above, clockwise from top left – Embraer and Air Peace sign the deal for new E175 jets; Allen Onyema delights the media with strong calls for a level playing field; Ministers from Nigeria and South Africa flank the directors general of the CAAs Capt Musa Nuhu and Poppy Khoza as they celebrate the first technical services agreement. Right: Nigeria's minister of aviation and aerospace development Festus Keyamo determined to see raise in standards.

PICTURES: AVIATION AFRICA

that asset management company, Falko Regional Aircraft, is to lease two E190s to the airline.

COO, Osita Okonkwo, said United plans to extend operations to several countries, including Ghana, Angola, South Africa, Niger Republic, Cote d'Ivoire, and Senegal.

But the highlight and most significant signing was not for airframes. Described as "a technical cooperation agreement which is very technical in nature," by South Africa's director general of civil aviation, Poppy Khoza, the Nigeria Civil Aviation Authority (NCAA) and the South African Civil Aviation Authority (SACAA) signed a landmark deal to achieve unified civil aviation regulation in Africa.



The deal will make Nigeria and South African aviation regulators share safety and security best practices with each other and is the first such agreement in Africa and seen as being done in the spirit of the Single African Air Transport Market (SAATM) project.

NCAA director-general, Capt. Musa Nuhu, who signed the agreement with Khoza at the summit said the agreement will

also streamline regulations to foster smooth flight arrangements between both countries, making "flight operations between the two countries be almost like domestic flights," and would unlock opportunities to enhance the implementation of SAATM.

"We will remove all the barriers and obstacles of operations between both countries. Going forward, we hope other countries will join us to see the successful implementation of SAATM," he said.

The agreement signing was witnessed by ministers from both countries.

"South Africa is doing 92 percent in terms of ICAO standards and Nigeria is doing 70 percent. By cooperating with SA, we are sure to close that gap and even exceed it," said Nigeria's Minister of Aviation and Aerospace Development, Festus Keyamo.

The next Aviation Africa Summit will take place in South Africa on September 16-17, 2024 and is hosted by the SACAA and the country's ministry of transport and organised by Times Aerospace Events.

Announcing the event Lisa Nkosinathi Mangcu, deputy minister of transport, Republic of South Africa urged the summit audience to be part of it and make the 2024 event the biggest and best yet.



**Adefunke Adeyemi:** "The SAATM challenge is implementation."

### WHAT NEXT FOR SAATM?

Given the role it plays in the liberalisation of African skies and unlocking the continent's true potential, the Single African Air Transport Market (SAATM) was never far from a panel discussion at this year's summit.

Officially launched in 2018, 44 countries have already signed up to SAATM, but the challenge now said Adefunke Adeyemi, secretary general of the African Civil Aviation Commission (AFCAC), is to push ahead with its implementation. AFCAC has already identified the countries that are willing to move forward with SAATM and is working with them to do so through a phased approach.

At the end of 2022, the organisation launched its pilot implementation project (PIP). The current focus according to Adeyemi is on granting fifth freedom rights to stimulate the market.

Since launching SAATM PIP in November, 11 new fifth freedom routes have been established with more opening soon.

Adeyemi also warned that if SAATM isn't widely implemented, the African continent is at risk of losing economic growth of US\$4.2 bn over the next two years.

During the official closing of this year's summit and the handover for next year's event in Sandton, South Africa's deputy minister of transport, Lisa Mangcu, reiterated the importance of SAATM in connecting African states and in implementing the African continental free trade area.

South Africa and Nigeria deepened their bilateral air services agreement at this year's summit signing a technical cooperation agreement that will help enhance flight operations between the two destinations.

### WHY AFRICA COULD LEAD THE WAY ON SAF

"Nigeria can become a leader in the emerging SAF industry, contributing to global efforts to combat climate change and reaping significant benefits for its own economy and society," according to Captain Musa Nuhu, director general and CEO, of the Nigeria Civil Aviation Authority, speaking during the sustainability session at the summit.

Sustainable aviation fuels (SAF) are the critical element in helping the industry meet its 2050 net zero emissions target, said Kuljit Ghata-Aura, Boeing's president of Middle East, Türkiye and Africa.

"The greatest way to reduce the cost of SAF in the African continent and have SAF produced sustainably is through local manufacturing," stated Ghata-Aura.

There is no SAF currently being produced in Africa today. However, he pointed to a roundtable on sustainable biomaterials (RSB) study, supported by Boeing, that highlights the potential for producing SAF and other biomaterials with roadmaps developed for Ethiopia and South Africa.

In Nigeria, NCAA is driving the development of SAF, but it will require a "concerted effort from a wide range of stakeholders, significant investments as well as supportive policies," explained Nuhu. "Nigeria is well endowed with resources that could potentially be used for SAF production, including a large agricultural sector that could provide feedstocks for biofuel production and a large population that can provide waste feedstocks," he said.



**ETAM AVITAT** Services Limited was inaugurated as a business with new approach to aviation support, offering services to both business jet owners and commercial airlines. We offer the highest level of professional and personalized services by being adaptable and flexible to clients requests and needs. Our goal is to provide uncompromised attention to detail, proficient quality and safety with absolute confidentiality and attentive service.

**Our Services**

Our core value and culture are safety, security, convenience and productivity. We offer a range of services not limited to:

- ▶▶▶▶ **BUSINESS JET CHARTER**
- ▶▶▶▶ **AVIATION TRAINING & RESOURCING**
- ▶▶▶▶ **FLIGHT PLANNING/ HANDLING SERVICES**
- ▶▶▶▶ **AIRCRAFT MANAGEMENT**
- ▶▶▶▶ **OPERATIONAL CONTROL CENTER (OCC)**
- ▶▶▶▶ **AVIATION FUEL**



**AVIATION FUEL**

Take advantage of our Global reach and access Jet A1 fuel at competitive prices. We can guaranty fuel release to our clients and partners within a short notice.



**OPERATIONAL CONTROL CENTER (OCC)**



Let us take care of the nerve center of your operation by providing efficient and proactive monitoring, coordinating, and managing of your overall flight operation, thereby giving you a tactical view of how best to manage your fleet, enhance customer care and produce an impressive return on investment.

**AIRCRAFT MANAGEMENT**



In order to generate revenue when you are not using your aircraft, have your jet under ETAM AVITAT management. Our airplane management service is geared to individual unique requirements. We are transparent, trusted and reliable.

**OUR MISSION**  
Building unique solutions, tailored towards quality service delivery that meets our clients' needs, through professionalism and best practice while delivering utmost value to our stakeholders.

**OUR VISION**  
The one-stop aviation services company renowned for excellent customer satisfaction and a commitment to the highest standards of safety and privacy.

FOR MORE INQUIRIES PLEASE CONTACT

+2348146286643,  
+1 (431) 277 4757

www.etamavitat.com

Suite A29 NAF Shopping Complex  
Sam Ethnam Air Force Base, Airport  
Road Ikeja, Lagos Nigeria.



@etamltd

Wouldn't you rather plan with us?

Our Partners:



FOCUS ON

**AVIATION AFRICA**

ROUND-UP



**Women in Aviation support Aviation Africa**

Women in Aviation Nigeria gave their support to this year's event, supporting the call for young women wanting to pursue STEM qualifications and pursue a career in aviation.

**WAKE: NO PLACE FOR GOVERNMENT INTERFERENCE**

Following his departure as board chairman from Ethiopian Airlines earlier this year, Ato Girma Wake told delegates at this year's Aviation Africa summit that he is "still connected to the airline, just not at a government level."

During an armchair chat with summit chairman, Alan Peaford, Wake explained his decision to step down from the board ultimately was due to a difference of opinion. "However, that doesn't mean I don't still speak with my former colleagues," he said.

Looking back at his illustrious career, Wake said that his model with Ethiopian Airlines that there must be "no government interference" had been integral to its success. "I was clear when I took over as CEO that I wouldn't be told what to fly or where to fly and that I wouldn't ask for \$1 from the government."

Wake tripled the airline's turnover from \$370m to \$1bn and its passenger numbers from 1.2 million to three million passengers between 2004 and 2008. Incentivising staff with a 40% pay rise was also fundamental to the airline's growth according to Wake.

Commenting on the airline's collaboration with other African carriers, Wake said that reaching every part of Africa was always part of Ethiopian's plan, but that could only be achieved through strategic partnerships, such as with ASKY, RwandAir and Malawian Airlines.

He concluded that while governments shouldn't interfere with the running of an airline, they do need to have a stake if it is to succeed.

**ZIPLINE DRONES DELIVER MUCH-NEEDED AID**

"In the world today, it is important to expand healthcare access to reach people, no matter where they live," Edmund Dambo, health systems integration officer, told the audience at Aviation Africa.

"Nobody should be excluded when it comes to freight, and delivery of commodities, and that's the Zipline experience in Nigeria and also in Africa."

Zipline is a self-sufficient technology company that designs its drones and the software that powers them, which works in wet and dry weather.

Africa is its key area, and it is currently present in Rwanda, Kenya, Ghana and the Ivory Coast, and it has recently expanded its UAV services in Nigeria

"Today, the company has contracts in three states in Nigeria, including Cross River, a state in Nigeria's Niger Delta area, and Kaduna," explained Dambo.

"There are 200 million people in Nigeria, and we now cover about 30 million people that are



Zipline's Edmund Dambo and the rest of the Nigeria team. PICTURE: ZIPLINE

most at need of medical supplies such as vaccinations and blood in areas that are difficult to navigate by road."

Other travel challenges faced in Nigeria are often from terrorist attacks.

"While it is a lower scale of insecurity compared to the prevailing Boko Haram threat in the north-east, abduction and terrorism by gunmen is an ongoing menace, Zipline is instrumental in getting urgent supplies in such situations," he said.

The US-owned company has so far made over 43,000 flights within Nigeria, covering more than 1,000 health facilities.

## OEMs FORECAST A BRIGHT FUTURE FOR INDUSTRY IN AFRICA

Both major manufacturers, Boeing and Airbus, were at the Aviation Africa Summit to offer their forecasts for the continent's aircraft orders into the near future.

Fast-growing intra-regional and domestic networks will drive African traffic growth of 7.4%, with the continent's commercial jet fleet which will double in numbers over the next 20 years to 1,025 new aircraft, according to Boeing.

During a briefing Randy Heisey, managing director commercial marketing for Boeing Middle East and Africa, said: "Africa is turning a corner and we're seeing a year of transition as we return to the trend of growth. We're currently seeing a restoration of the long-haul passenger market. We're also seeing airlines move away from managing their fleets to renewing and growing them, while globally we're seeing airlines returning toward profitability."

Airbus shares the optimism. Its latest global market forecast projects demand for 1,180 aircraft of over 100 seats in size for African airlines over the next 20 years.

"The future is bright for Africa," said Joep Ellers, airline marketing director Africa for Airbus, with economic growth faster than



**Randy Heisey:** "Globally we're seeing airlines returning toward profitability."  
PICTURE: AVIATION AFRICA

the world average, the fastest growing population in the world, urbanisation and middle-class development, the attractiveness for inbound tourism, strong potential of outbound and intra-Africa tourism, a potential from liberalization (SAATM, the Single African Air Transport Market) and low-cost carrier development.

Of the 1,180 deliveries anticipated in Africa in the next two decades, Airbus sees 880 of these being single-aisle types, with 300 being widebodies.

## TECHNOLOGY BOOSTS AIRPORT EFFICIENCY

With passenger traffic set to triple over the next two decades, the adoption of new technology has a key role to play in helping airports improve operations, security, and the passenger experience.

During a panel looking at how airports are facing the future Olumide Famuyide, SITA's account manager for West Africa, noted how the potential for biometric, and self-service solutions as well as touchless access points for Africa's airports is huge.

□□□□

Conakry Airport's managing director, Namory Camara, conceded there is demand for the wider adoption of biometric and self-service technology, he also stressed the importance of understanding the customer base and passenger behaviour to localise these solutions.

Askin Demir, CEO, Dakar Airport in Senegal said other stakeholders, including governments and airlines, must be involved in the adoption of these technologies to ensure their effective implementation.

And Kabir Mohammed, managing director, Federal Airports Authority of Nigeria (FAAN), referenced the significant cost implications of deploying new technology, not just in terms of the financial investment, but also capacity development and the need to train personnel. ▲



**AviAssist's Tom Kok and Airbus' Hugues Laloë sign the partnership deal at Aviation Africa in Abuja.** PICTURE: AVIASSIST

## AVIASSIST'S AIRBUS SAFETY DEAL

Africa's leading aviation safety promotion organisation, AviAssist, took to the stage at the Abuja summit to sign a partnership with airframer Airbus.

"The number one priority of Airbus is safety – a safe aircraft, safely operated in a safe air transport system," Airbus director for international safety programmes, Hugues Laloë said.

"Africa's aviation industry is growing. That growth requires lots of well-trained, motivated new aviators in different domains, such as maintenance or flight operations. This partnership underlines our commitment to support developing the safety competencies that these aviators need to foster a strong safety culture. Working with AviAssist gives us access to an effective way of promoting safety in the region."

Director of AviAssist, Tom Kok said: "We are keen to work with Airbus towards equipping every African aviation professional with safety promotion skills to help meet future industry needs. The partnership will assist the Foundation in bringing our customers the best possible safety promotion experience". ▲

Current load factors across the sector are currently at 70%, which is similar to pre-pandemic levels, with network carriers back at 100% of 2019 levels and low-cost carriers (LCCs) not quite there yet.

"African carriers are well-positioned to support intra-regional traffic growth and capture market share by offering services that efficiently connect passengers and enable commerce within the continent," said Heisey.

The demand for air traffic in Africa will require a significant increase in the continent's air transport workforce, said Ellers. Airbus estimates that the region will need 14,000 more pilots, 17,000 extra technicians and 23,000 more cabin crew to meet this growth in demand.

Heisey suggested the demand for aviation personnel may rise to an estimated 69,000 new professionals, including 21,000 pilots, 26,000 cabin crew members and 22,000 technicians.

"We are seeing a talent drain where other regions are suffering shortages and taking resources away from Africa due to wage competition," he said, underlining the ongoing challenge to retain and recruit a skilled workforce for Africa's aviation sector. ▲

## AFRICA 'LACKS BIJET MAINTENANCE EXPERTISE'

Business jet maintenance capability is an issue in Africa in that it is very limited with little expertise, according to Stefan Buschle, head of MRO sales at Jet Aviation, a Swiss-based provider of business aviation services.

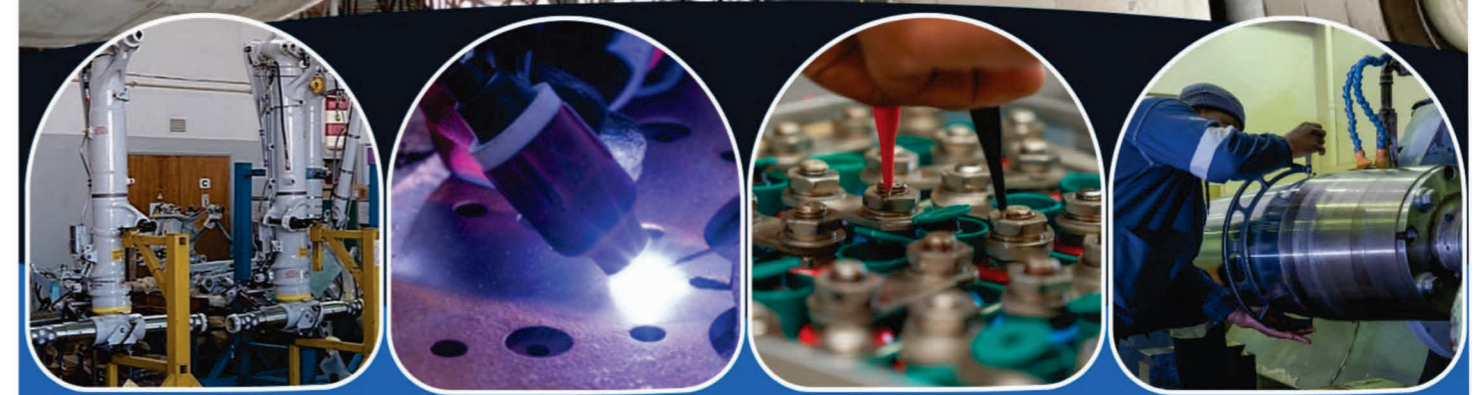
"While business aviation is strong in Nigeria, there's very limited maintenance capability here in Africa generally. There is ExecuJet and South Africa have a few, and then some do maintenance on their own aircraft, but really the region lacks expertise," said Buschle.

"You know, it's expensive to have everything on your own just for a few aircraft – your own technician, your own tools, your spare parts. There's not much capacity. On the other hand, there is a multitude of aircraft types. That's one of the things a company like ExecuJet suffers. Having so many aircraft types, you need to have a type rating for all the engineers, all the tools, and this makes it all expensive. And then many people are unhappy with a sale service and prices.

"It's also hard to make people understand the differences in a market, like in every market, you have different sorts of player, high quality, low quality, high price, low overall price."

Jet Aviation is an 'expert' on heavy maintenance, down to interiors, but Buschle said that 'comes with the cost of quality.'

"Sometimes they don't see the benefits of it. But on the other hand, especially governments, we've been able to foster long-term relationships with people being happy about a one-shop overall service," he said. ▲



# AFRICA'S LEADING WORLD-CLASS MRO

Maintenance, Repair & Overhaul Organisation

flysaa.com



**SOUTH AFRICAN AIRWAYS**  
TECHNICAL

Capabilities in Line Maintenance, Base Maintenance, Engineering, Planning and Component Maintenance

SAA Technical holds the following:  
South Africa CAA - (AMO 1)  
United States FAA - (DW5Y820M)  
EASA 145 - (EASA 145.0136)

Email: SATMarketing@flysaa.com

HOW UPGRADES CAN HELP PULL IN MORE WILDLIFE TOURISTS...

# MAGNETIC STRIPS...



Arua is one of the airstrips listed to undergo a significant upgrade under the Ugandan government's plans to bring in more tourists to the safari parks. PICTURE: UGANDA CIVIL AVIATION AUTHORITY.

Uganda is seeking to revamp a series of up-country airstrips to handle international flights, as well as boosting tourism to the country's national parks.

Alan Dron reports.

International air passengers will be able to fly direct to several of Uganda's national parks and protected areas, if a government scheme comes to fruition.

Up-country airfields at Kasese, Kidepo, Pakuba and Kisoro are planned to receive an upgrade to international standards that will allow travellers to fly in to nearby attractions. The project will allow passengers to avoid travelling via the country's busy Entebbe International Airport, near the capital, Kampala, then having to transfer, either by light aircraft or surface transport, to resort areas.

□□□□□

According to the Uganda Civil Aviation Authority (CAA), Kasese airfield, together with another at Arua, are slated for development to category 4C airports that would allow them to handle aircraft of the size of a Boeing 737-500.

The -500 was the smallest of the second-generation models of the Boeing twin jet and typically can carry a maximum of around 130 passengers in an all-economy cabin configuration – perhaps 100-110 in a two-class layout.

However, this is also the size category for the



PICTURES: BIRDSIMAGESTOCK.COM

new ranges of 'crossover' jets such as the Embraer 190 and Airbus 220 that span the gap between regional turboprops and mainline narrowbodies like the Airbus A320 and larger members of the Boeing 737 family. These are becoming increasingly popular with airlines in Africa.

The CAA told *African Aerospace* that master plan and preliminary engineering designs for airfields at Arua and Gulu have been completed. These provide for a paved runway of 3,200m x 60m for Arua in place of the existing gravel strip, plus new terminal complex and cargo centre costing around \$53 million.

Gulu, meanwhile, will see a major expansion, including the construction of a new 3,100m x 60m runway, as well as a new passenger terminal, taxiways, apron, cargo complex, control tower and fire station. The first phase of this project is estimated to cost \$56 million.

Kasese will have its existing 1,500m grass runway replaced by a paved runway 2,500m x 45m. Like Gulu, it will undergo a transformation, with a new passenger terminal complex, together with cargo and fuel facilities and a new taxiway system. Cost for the first phase of the project will be \$57 million.

Smaller-scale improvements will take place at eight other airstrips – Pakuba, Kisoro, Kidepo, Jinja, Tororo, Moroto, Soroti and Mbarara. The value of the works there range from \$7m to \$350,000 and include such improvements as runway repairs, improvements or extensions, perimeter fencing and, in the case of Pakuba, a new passenger terminal.

Like Kasese, Kidepo, Pakuba and Kisoro will be given tarmacked runways and provided with immigration facilities, allowing international

flights to fly there directly and give tourists access to nearby national parks.

Uganda's minister of tourism, wildlife and antiquities, Tom Butime, announced the upgrades earlier this year at the Uganda Tourism Board's "Pearl of Africa" tourism expo.

Previously, the only airstrips at Kasese, Kidepo, Pakuba and Kisoro National Parks were bush airstrips, which meant that visitors had to enter Uganda via Entebbe and then find alternative transportation such as a Cessna Caravan light aircraft or to travel by road to visit the locations.

The upgraded airstrips will not only be able to handle much larger aircraft, but also executive jets, allowing wealthy visitors to fly in with friends or family. Tourism is a significant revenue-earner for Uganda and accounted for around 7% of the country's GDP last year.

Uganda received slightly more than 800,000 foreign tourists last year, a 59% increase over 2021's figures, but still significantly below pre-pandemic levels of almost 1.5 million. Tourism brought in \$712 million, accounting for around 12% of total exports.

It is in the light of increasing this valuable trade that the airfield improvements can be seen. ▲



## WINELANDS' GRAND OLD LADY GETS READY FOR A FACELIFT

The Cape Winelands' Airport in South Africa is firming up its vision for the future ... and its vision is big and bold. The emerging 'new' airport sees itself as a key alternate airport for the Western Cape.

The challenge facing airlines operating into the Western Cape is that Cape Town International is the only large airport within 200 nautical miles of Cape Town. Should Cape Town International's runway be blocked, or the weather be below minimums, there is no alternate airport closer than George.

Nick Ferguson, the managing director of Cape Winelands Airport holding company rsa.AERO, points out that they are keen to make the airport available as a nominated alternate for part 121 Operations. This will save airlines a huge amount in terms of fuel carried for alternate airports for flight planning.

□□□□□

Ferguson points out that on a long-haul flight, an airliner will burn four tonnes of fuel to carry 10 tonnes of fuel. The reduced fuel load from being able to nominate a closer alternate will be a large saving to the airlines, and thus ultimately to travellers.

Ferguson also says that the airport is aiming to achieve international status and thus serve as a hub for regional, as well as domestic flights.

Deon Cloete is the new managing director of the



Cape Winelands Airport. He reminds us that the airport is not really new, but is in fact 80 years old. He says, "It is a grand old lady, ready for redevelopment. Construction work on the first phase is expected to commence in early 2024." This includes the development of a new runway with a Category three ILS.

Cloete says there will be a 3,500m long runway with no restrictions and a code E classification. It will thus be capable of accepting long-haul widebody aircraft.

General aviation will however not be squeezed out. There will be a cross runway for smaller aircraft.

The terminal buildings and infrastructure will be on the western side of the airport. Cloete says they are planning to start operating the first phase of the airport from 2027. ▲



Nick Ferguson: Cape Winelands' Airport is aiming to achieve international status and thus serve as a hub for regional, as well as domestic flights. PICTURE: GUY LEITCH

# MAN ON A MISSION...

*Eivind Lindtjørn is a typical Mission Aviation pilot flying in Africa. He combines his passion for flying into not just a job, but a higher calling. Guy Leitch and Odd Arild Nessa report.*

"Africa is in my blood. My grandparents were some of the first Norwegian missionaries in Ethiopia. My father was a doctor, and my mother a nurse," Lindtjørn said.

After eight years in Ethiopia, he returned to Norway as a 16-year-old. Adjusting from Africa to cold Norway was difficult – and he wanted to fly.

He worked odd jobs to learn to fly. With a fresh private pilot's licence, he contacted the Mission Aviation Fellowship (MAF) and asked what he needed to become a MAF pilot. He was told to become an aircraft mechanic, a commercial pilot with at least 500 hours – and attend bible school!

Lindtjørn was undaunted. By 2006, he was 28 years old and had met all the requirements, as well as seven years' experience as an aircraft mechanic with SAS. He packed up all he owned



**STRIP TEASE: Dodging the ubiquitous donkeys on African airstrips.** PICTURES: SVEIN-ROBERT SOLBERG

and travelled to Tanzania to start the job he had been working towards for 12 years.

"I was finally a mission pilot. I had some wonderful years out in the bush! MAF based me in Kigoma in Tanzania where I flew a Cessna 206 carrying the sick, health workers and missionaries. I was living out my calling – and my dream," he said.

In Tanzania he met Nadia who worked as a volunteer for a children's home. They married in 2010 and then, when they had children, moved to be near her parents in the USA. Then, about a year ago, Lindtjørn received an enquiry from MAF who needed an experienced pilot in Tanzania.

"I answered that email within 30 seconds. There's no other place in the world where I feel so at home as I do in Tanzania. I look forward to every day and every flight," said Lindtjørn. You can almost see the African sky in his eyes!

It's not uncommon for him to be in the field for six weeks, so his time at home is valuable. While his family always comes first, they respect his work. "Having children at home, I



**WELCOME PARTY: The arrival of an aircraft is always a day for great excitement - especially for local children. INSET: Eivind Lindtjørn flying a MAF Cessna 206 on a typical mission in Tanzania.**

experience a different sort of love for those that I serve out in the field. I see my own children in those who are suffering, and that gives my service even more meaning."

"Once, a nurse came running up to my plane with a little girl. Her mother couldn't feed the child, which was emaciated. A 10-minute flight saved that tiny, sick child. That is what my job is about. There are countless such stories, and it's a privilege to serve in this way," said Lindtjørn.

"We don't just meet one need, but the whole person, and the plane makes that possible. If MAF didn't fly in Tanzania, measles would have recurred, and women would have died in childbirth. We fulfil MAF's and my own mission statement," he said with conviction. ▲

- Affrètements aériens, vols à la demande  
*charter and on-demand flights*
- Location d'avions  
*Aircraft leasing*
- Achat et vente d'avions  
*Aircraft sales and purchase*



VMS AERO, votre partenaire aéro avec une présence mondiale :  
VMS AERO, your aero partner with a global presence :

United Kingdom, Canada, United Arab Emirates, Gabon

Contacts :  
Email : [contact@vms.aero](mailto:contact@vms.aero)  
Tel : +33 6 20 31 19 03 / +241 62 24 24 02

- Cargo aircraft / avion cargo**
- Corporate, VIP & Medevac aircraft / Avion d'affaires, VIP & médicalisés**
- Commercial Aircraft / avion de ligne**
- VIP & OGP Helicopters / hélicoptères, VIP & OGP**



The Mark of Excellence & Innovation

World Class Aircraft Hangar Doors



[jewersdoors.co.uk](http://jewersdoors.co.uk)  
[sales@jewersdoors.co.uk](mailto:sales@jewersdoors.co.uk)

+44 1767 317090 (UK)  
+971 4 430 9002 (UAE)



Jewers Doors also on

**BECOME A CORPORATE FRIEND AND SUPPORT AVIATION SAFETY**

- FOR JUST \$500 PER YEAR YOU:
- associate your brand with our mission
  - advertise free in 42 African countries
  - will receive our magazine "Safety Focus"
  - can access our online Focus Sessions

Go to [www.aviassist.org](http://www.aviassist.org) and click 'SUPPORT AVIATION SAFETY'



**THANK YOU**

**SAFETY PROMOTION  
DELIBERATELY DIFFERENT**

A round-up of all the latest defence stories in Africa. Compiled by **Jon Lake**.

**Chad bound: The Hürku-C is the armed version of the Hürkus turboprop basic trainer.** PICTURE:



# Turkey strengthens TAIs with African military

**T**urkish Aerospace (TAI) has achieved significant export success during the past year, receiving orders worth US\$ one billion – including several from African customers.

Recent deliveries include three Hürkus-C light attack aircraft and two Anka-S UAVs to Chad, two Hürkus-Cs to Niger, and the last of five Anka-S UAVs for Tunisia, while the Anka-S is also on order for the Algerian Army.

The Hürku-C is the armed version of the Hürkus turboprop basic trainer, optimised for the close air support role as well as for pilot training. It can carry a maximum weapons load of 3,300lb (1,500kg) on four underwing pylons, and can also carry a forward-looking infrared (FLIR) sensor. It is capable of operating from unprepared runways, making it a particularly useful counter-insurgency (COIN) aircraft in Africa.

The Anka-S UAS is the serial production version of the TAI Anka. Like the older Block A and Block B versions, the Anka-S is powered by a Thielert Centurion 2.0S engine and introduces a satcom antenna and a new flight control

computer. The aircraft is equipped with a StarFIRE 380-HDL or Aselsan CATS FLIR turret, and can be armed with the Roketsan MAM-L air-to-surface missile, which are known to have been supplied to Chad.

In West Africa, members of the 818th and 571st mobility support advisory squadrons travelled to Lomé, Togo, in May 2023 to conduct the first military-to-military engagement between the Togolese Air Force (TAF) and the 621st air mobility advisory group's air advisors for 11 years.



The advisors saw the TAF's ageing SOCATA TB-30 Epsilon turboprop trainers and Beech 200 King Air's at Base Transport de Lomé, and worked with their Togolese hosts to understand their training and operational needs, and to aid the TAF in effectively and efficiently conducting maintenance and logistical operations practices while strengthening the aviation-related partnership between the US Air Force and the TAF.

Togo is a strategically important partner for the US, with a surge in attacks by Jama'at Nusrat al-Islam wal-Muslimin (JNIM) near the Burkina Faso border and Togolese forces have been combating terrorist activities enthusiastically and effectively.

"Throughout the assessment, it became abundantly clear that the Togolese Air Force is performing at a high level across many of its mission sets to secure its northern border from terrorist extremists," US Air Force tech. sgt. Sandre Lillington, an 818th MSAS air transportation air advisor observed.

"This engagement showed a willingness from the Togolese to grow its capabilities and work with the United States Air Force to ensure regional stability. This aligns directly with 818th MSAS's mission of building partnership capabilities," Lillington said.

**Gabon C295 order is up in the air**  
Gabon's recently deposed president, Ali Bongo Ondimba, had given his approval for the

**ON THE UP:** South Africa will upgrade its Rooivalk Atlas attack helicopters.  
PICTURE: DENEL



## NIGERIA CUTS RIBBON ON NEW FACILITIES

Less than two years after the Nigerian Air Force introduced 12 Embraer/SNCA-29 Super Tucanos into service, the Nigerian ministry of defence hosted a ribbon-cutting ceremony for new facilities for the aircraft at Kainji Air Base on April 27.

The \$38-million project was undertaken by the US Air Force life cycle management centre's (ALCMC) air force security assistance and cooperation (AFSAC) directorate in partnership with the US Army corps of engineers, and was AFSAC's first major construction project in sub-Saharan Africa. Security infrastructure was upgraded, with the installation of miles of new fencing and improved base entry control points.

□□□□

Twelve sunshades were installed to provide protection for maintenance crews and aircraft when not in a hangar, and a new taxiway and hot cargo pad were constructed. Work also included the creation of a new mission planning and debriefing facility with a battle aviation training device, as well as a munition storage area with earth-covered magazines for secure storage capability, and a munitions maintenance and assembly facility.

An existing hangar was modernised, gaining more electrical power to maintain the aircraft while tyre and battery facilities were refurbished and upgraded.

The programme forms part of a larger US \$500 million total package that includes the acquisition, and long-term sustainment of the aircraft and training and infrastructure improvements. ▲

# ALLIANCE PLOTS THE NEW ROUTE FOR ROOIVALK

**Guy Leitch reports on South Africa's plans to upgrade its attack helicopter force.**

South Africa's Denel Group has signed an agreement with Turkey's Aselsan under which the two companies will collaborate on an upgrade for the South African Air Force's Atlas Rooivalk attack helicopters.

Although Aselsan is a Turkish company, its Pretoria-based subsidiary, Aselsan South Africa, serves as a centre of excellence for the parent company in Turkey with its own autonomous design and development capabilities, and also acts as the hub for Aselsan's business development strategy in sub-Saharan African markets.

Aselsan SA has previously provided advanced camera systems to Denel's OTR test range and to other local South African customers, including the Institute of Maritime Technology, Paramount Technologies, and Reutech Radar Systems.

The agreement between Denel and Aselsan builds on the memorandum of understanding (MoU) signed during the Africa Aerospace and Defense (AAD) 2022 exhibition, under which the companies agreed to work towards the integration of Aselsan's MEROPS (multi-spectral extended range optical sight) system on the Rooivalk.

MEROPS is the advanced version of the Aselsan CATS (common aperture targeting system) used on the TAI Anka and Bayraktar TB2

UAVs, and promises expanded all-weather and precision attack capabilities. MEROPS was specifically-designed for long-range observation and reconnaissance, area illumination and target designation in extreme situations, particularly in low light and in the difficult lighting encountered at dawn and dusk, and in smoke and dust.

The system features the latest image processing and image enhancement technologies, and uses the latest machine vision and AI-based algorithms for moving target and threat identification and classification, and provides multi-target auto-tracking with automatic target re-acquisition.

□□□□

MEROPS incorporates a thermal imaging sensor (prioritising medium and short-wave for low light performance), a low-light television and a laser rangefinder/designator for accurate delivery of precision-guided weapons.

The MEROPS system consists of a single self-contained LRU (line-replacement unit) with quick-release connections, allowing payloads to be rapidly changed without calibration.

Michael Kgobe, Denel's interim group chief executive officer, said that Aselsan's "expertise

and capabilities make them the preferred technology partner for the South African Rooivalk modernisation programme," and that the objectives and scope of the memorandum of understanding (MoU) signed in September 2022 have already been exceeded.

Denel and Aselsan signed a milestone achieved certificate on Thursday 27 July, 2023, detailing the "defined technical solution" and laying out the planned division of work on the avionics modernisation that forms the basis of the Rooivalk modernisation programme from their current block 1F baseline configuration.

It is now expected that Aselsan will also provide and integrate an enhanced glass cockpit with larger screens, digital moving map, a new helmet-mounted display system and a modern flight management system as part of the upgrades to the Rooivalk's avionics system. The new systems will be driven by two new mission computers and a new weapons systems computer, while a new flight control computer will confer improved agility and responsiveness.

The new helmet-mounted sight display will provide both crew (pilot and WSO) with a heads-up display of critical information in their line of sight, making nap-of-the-earth flight easier and safer. The system will allow the cannon (or missile seeker heads) to be slaved to the pilot's line of sight, allowing him to engage off-boresight targets with greater accuracy than is possible with the current system (the Thales TopOwl helmet-mounted display).

The upgraded Rooivalk will also receive a new navigation system incorporating an inertial navigation system (INS) and

CONTINUED FROM PAGE 43

purchase of an Airbus C295 military transport aircraft for the Armée de l'air Gabonaise (Gabonese Air Force) before he was overthrown in a military-led coup.

The deal which will be funded using a CFA31 billion (\$52 million) loan secured from Spain's Santander Bank, and now approved by the government. The acquisition amounts to about 20% of Gabon's 2023 defence budget.

The new airlifter will augment the CN235M already operated by Gabon's Air Force, and the single Puma and two Gazelles that are in service. A number of Lockheed Martin C-130H Hercules are believed to have been withdrawn from use.

The frontline element consists of six former SAAF Dassault Mirage F1AZ fighters and two Atlas Impalas operated by EC 1-02 at Franceville/Mvengue.

An ATR 42 and a Falcon 900 are used for VIP transport, while the Garde Republicaine Gabona flies two Eurocopter EC120Bs, a pair of EC135T2+ helicopters, and an EC225LP Super Puma.

□□□□

On the other side of the continent, during the graduation ceremony for 12 new pilots and 52 engineers, lieutenant general Charles Okidi, the commander of the Ugandan Air Force, praised the battlefield performance of the Russian-made Mi-28NE night hunter attack helicopters that were delivered last year.

The aircraft have already seen active service against the Lord's resistance army (LRA), an insurgent group purporting to represent the interests of the Acholi people in northern Uganda.

A small number of Mi-28NE attack helicopters (which have the reporting name 'havoc') have been delivered to Uganda, augmenting about a dozen Mi-24s and a similar number of Mi-17s. The type has also been delivered to Iraq and Algeria.

Okidi thanked and applauded the first Mi-28 pilots for providing air power during recent operations. "There is no doubt that the introduction of the attack helicopters into the battlefield changed the tides of war in Northern Uganda against the Lord's Resistance Army (LRA) in favour of the UPDF and continues to do so in the subsequent operations. So, with the acquisition of new air assets, we are ready to serve our beloved country more in that capacity," he said.

### Uganda's Su-30s sent to Belarus for repair

The Uganda Peoples' Defence Forces – Air Force (UPDF-AF) dispatched two of its Sukhoi Su-30MK2 aircraft to the 558th aircraft repair plant in Baranavichy, Belarus, on July 6, 2023. The two Su-30MK2s are part of a fleet of six that the UPDF-AF acquired from Russia in 2011. One aircraft was lost in a fatal accident in 2020, killing both pilots.

Previously maintenance was undertaken by Russia's Komsomolsk-on-Amur aircraft plant, part of the United Aircraft corporation, but on March 4, 2022, Uganda reportedly signed a memorandum of understanding (MOU) with India's Hindustan Aeronautics Limited (HAL) for the future maintenance and technical support of the Ugandan Su-30s fighter jets.

The decision to send two Su-30s to Belarus for maintenance instead of India was unexpected, and has not been explained, but reflects growing military cooperation between Uganda and Belarus.

Uganda signed the \$740 million agreement for six Sukhoi Su-30s in April 2011 and the aircraft were delivered in pairs in July 2011, October 2011 and May 2012. Based at Entebbe, the aircraft operate in the air-to-air and air-to-surface roles, and have conducted missions against Al Qaeda targets in Somalia and against opposition forces in South Sudan.

### Zambia supports SAMIM with C-27J

The Zambia Air Force (ZAF) has been stepped up its support for the Southern African Development Community Mission in Mozambique (SAMIM) with its Leonardo C-27J Spartan transport aircraft, and has now also forward-deployed a force protection unit.

The ZAF deployed a C-27J aircraft to SAMIM at the beginning of 2022, and soon afterwards used the aircraft to airlift more than 50,000 kilograms of cargo for the South African National Defence Force from Waterkloof Air Force Base in Pretoria to Mozambique.

The ZAF has supported SAMIM which has recaptured a number of villages, dislodged terrorists from their bases, created safe passage for humanitarian aid and has facilitated a return to normal life for internally displaced people (IDPs).

Lieutenant general Colin Barry, the ZAF Commander, said that his command was committed to supporting the Zambian government's peace efforts to stabilise the Cabo Delgado region of Northern Mozambique. "Currently, the Zambia Air Force is the only service from the Zambia Defence Force deployed under SAMIM. We will continue to service the mission with airlift capability through the employment of the C-27J. The regiment unit being deployed today will be responsible for base protection and security of storage facilities and air asserts," he said.

Zambia has pledged to provide more assets for peacekeeping operations in Africa. "Zambia has a proud history of engaging in peacekeeping efforts with the United Nations, dating back to 1988 when the country first deployed peacekeepers to Iraq. Currently, Zambia has a significant number of troops deployed in various peace operations with the majority in the UN multidimensional integrated stabilization mission in the Central African Republic (MINUSCA)," Barry pointed out. ▲



CONTINUED FROM PAGE 45

global positioning system (GPS), as well as software-based secure V/UHF and HF radios, a mod-5/S capable identification friend or foe (IFF) transponder and a digital intercom system. A digital data link system will also be provided, facilitating the exchange of real-time information and targeting data and improving overall situational awareness and mission co-ordination. The aircraft is also expected to receive a new mission planning and debriefing system. To improve survivability, the aircraft is expected to receive enhanced defensive systems, including a state-of-the-art radar warning receiver (RWR), chaff and flare dispensers and an infra-red jammer.



The Rooivalk combat support helicopter upgrade aims to improve supportability as well as enhancing operational capability, and there is therefore a strong emphasis on improving reliability and addressing obsolescence issues.

The Denel (originally Atlas) Rooivalk, also known as the combat support helicopter (CSH), is Africa's only indigenous attack helicopter. Development began in 1984 while apartheid South Africa was under an arms embargo enacted under United Nations Security Council Resolution 418, which prevented the import of attack helicopters.

South Africa began the parallel development of two helicopters based on the Aérospatiale SA 330 Puma/SA332 Super Puma airframe and dynamics system. The Atlas Oryx was a minimum change copy of the Super Puma, while the Rooivalk was an all new design, sharing only the dynamics system of the Super Puma. The Rooivalk's development began under the project name "Chickadee" in 1984, which became "Project Impose".

## ZAMBIA ORDERS ENSTROM HELICOPTERS



**In force: The Enstrom 480B is used by Botswana a police.**  
PICTURE: SAFOMAR

Zambia has ordered a pair of Enstrom Helicopters Model 480Bs for use by the nation's air force, primarily for training and utility transport.

The helicopters will be based at Lusaka Kenneth Kaunda International Airport with No.9 tactical air mobility command, and will operate alongside the air force's Z-9WE observation helicopters and some Agusta-Bell AB205 light transport helicopters.

The Safomar Aviation Group, a South African regional MRO and flight school co-ordinated and assisted Enstrom in the sale to the ZAF, helping with logistics, and with the specifications and configuration of the helicopters.

Shai Shalem, Safomar's managing director said that: "We are excited to have Enstrom back and under new management with exciting and excellent helicopter upgrades. It is an honour to have sold two of the first helicopters off the line under the new ownership. These 480B's are just the right fit for military and law enforcement missions."

The contract for the two Enstrom 480Bs was signed in February and includes training for pilots and maintenance personnel. The helicopters will have Garmin avionics and glass cockpits and will be fitted with cargo hooks and hard points for cameras and FLIR systems. ▲

The Rooivalk was preceded by the Atlas XH-1 alpha concept demonstrator, which was based on an Aérospatiale Alouette III airframe with a stepped tandem cockpit and a GAI Rattler 20mm cannon in a steerable turret. First flown on February 3 1985, the XH-1 proved the concept sufficiently for Atlas and the South African Air Force to go ahead with the development of the dedicated Rooivalk attack helicopter.

The Rooivalk experimental development model (XDM) first flew on February 11, 1990.

The Rooivalk advanced development model (ADM) flew on May 22, 1992 and was used to verify the avionics design and implementation, weapons development, and as an integration platform. The Rooivalk engineering development model (EDM) incorporated lessons learned from the XDM and ADM and was used to qualify the avionics, weapon systems, airframe, and airborne systems before serial production could commence.



Plans to order 36 production Rooivalks to equip three squadrons were cut back for budgetary reasons and the South African Air Force ordered 12 helicopters, designated as the Rooivalk Mk 1 in SAAF service, and the first of these entered service in July 1999. One airframe (679) was damaged beyond repair in 2005, but the remainder were upgraded to Block 1F standards with Mokopa anti-tank guided missiles (ATGMs), and redelivered to number 16 squadron, based at AFB Bloemfontein near Bloemfontein from April 1, 2011.

Denel, the South African Air Force and Armscor looked hard at developing a Rooivalk Mk II helicopter, and there have been discussions with a number of potential export customers, including Egypt, Nigeria, Brazil, India and Poland. ▲



## Benin boosts fight against terrorism

In Benin, the Force Aérienne du Bénin (Benin Air Force) has received two H125M and three AS332M1 Super Puma helicopters as part of international contributions aimed at aiding the country's fight against terrorism.

The H125Ms were delivered from Girona in Spain in February, and were fitted with Trakka Systems TC-300 long-range HD electro-optical/infrared camera systems and TM-100 full-featured mission mapping and video management units following their delivery. They will augment two AS550 Fennec helicopters delivered in

2020, as well as the air force's existing fleet which consists of a single Mi-8 helicopter, single DHC-6, BAe 748 and MA600 transports, and a handful of Humbert Tétrás CSM ultralight aircraft.

The Super Puma helicopters were described as a gift from France, and were handed over to the Benin government on July 6, 2023, in a ceremony attended by French defence minister Florence Parly and Benin's minister of defence Fortunet Nomade, though they are all ex Royal Jordanian Air Force aircraft and were

delivered as airfreight by Maximus Airlines An-124-100 directly from Amman to Benin on June 28, 2023. They seem to have been delivered in lieu of a previous plan to acquire Mi-171 helicopters from Russia.

The helicopters will equip the Escadrille d'Hélicoptères (EdH) at Cotonou/Cadjehoun air base (Aéroport International Cardinal Bernardin Gantin), and will support the country's counter-terrorism operations in the north of Benin (operation mirador), where attacks by terrorist groups have increased in recent years. ▲

KC-390 MILLENNIUM

# MISSION ACCOMPLISHED

**AFTER AN EXTENSIVE TEST CAMPAIGN THE KC-390 MILLENNIUM IS CERTIFIED FOR FULL OPERATIONS.**

From the outset, the KC-390 Millennium was designed to set a new benchmark in the medium-size military transporter segment. Developed with support from the Brazilian Air Force (FAB) and Brazilian Government, the largest and most complex aircraft ever built in the southern hemisphere has gone through a rigorous and challenging testing program, including 3,500 prototype flight test hours and close to 85,000 hours of lab tests. In March 2023, it received the coveted Full Operational Capability certification from the Brazilian Military Certification Authority (IFI - Institute of Industrial Development and Coordination), with the platform meeting or exceeding all requirements. This seal of approval, which is extremely difficult to attain, confirms the KC-390 Millennium is ready for full operational duties in all missions and showcases to the world its class-leading reliability, flexibility and performance.

#C390UnbeatableCombination  
c390foc.com/en/



CHALLENGE.  
CREATE.  
OUTPERFORM.

**IN DEMAND:** Russia has completed the delivery of 18 Kazan Ansat helicopters to Zimbabwe.

PICTURE: ZIMBABWE MAIL



## Russia still up in arms despite Ukraine war

*The poor performance of Russian hardware, especially tanks and heavy weapons in Ukraine, has hit demand for Russian equipment. But Russian imports in Africa continue to grow.*

**Jon Lake** reports.

In late March, *Le Monde* reported that Russia had “overtaken China” as the leading arms seller in sub-Saharan Africa, and was responsible for a quarter of the arms purchased by African states south of the Sahara. The proportion rises from 26% to 40% if the Maghreb is included, where Algeria remains a major importer of Russian arms, though most Russian arms exports are accounted for by relatively low-tech, low value equipment, such as armed vehicles or light artillery.

While a 2023 report by the Stockholm International Peace Research Institute (SIPRI) said that Russia had overtaken China as the top weapons supplier to Sub-Saharan Africa between 2018 and 2022, this may be a temporary ‘blip’

Russia’s market share went from 21% to 26%, while China’s market share fell from 29% to 18%, between 2013 to 2022. But despite this, even before the Ukraine war, China had increased its sales of weapons to sub-Saharan Africa, and Western sanctions are now making it harder for Moscow to sell weapons, opening the door for more Chinese-made arms.

Western sanctions against the Kremlin have already eroded Russia’s ability to restock complex parts, including microchips used in precision-guided munitions and guidance systems, while attrition of Russian equipment in Ukraine has meant that production for export has been de-prioritised.

The poor performance of Russian hardware, especially tanks and heavy weapons in Ukraine has also hit demand for Russian equipment, while the CAATSA (Countering America’s adversaries through sanctions act) sanctions have further discouraged nations from buying from Moscow.

Russia has historically enjoyed warm relations with many African countries, with ties forged during Soviet times, a mutual mistrust of the West and some alignment along ideological and economic lines.

Russia has cultivated ties in unstable areas, not least by deploying the paramilitary Wagner group to support struggling regimes. Russia has also targeted those poorer nations who habitually opt for the cheapest ‘kit’ and the most financially advantageous contracts.

Thus Russia has become the most important arms supplier to Mali – where the Wagner private security

group’s mercenaries are also deployed – but even Mali has sought to diversify its sources of supply, buying equipment from Brazil, China, Turkey and the United Arab Emirates, among others.

Russia supplied six second-hand Czech-built Aero L-39s to the Central African Republic in May 2023, and has completed the delivery of 18 Kazan Ansat helicopters to Zimbabwe. CAATSA sanctions mean that support for their US PW207K engines may be problematic, and newer examples of the type are now powered by Russian VK-650V engines.

A planned purchase of two Mil Mi-171E helicopters by Benin has reportedly been delayed, while Guinea is believed to have abandoned its plan to acquire Mi-24 attack helicopters in the face of the threat of CAATSA sanctions. But the list of potential customers for Russian arms may be declining anyway. In critical votes in the United Nations General Assembly Russia enjoyed far less support from African nations than might have been expected.

□□□□□

In March 2022, 28 of 54 African nations voted to condemn the invasion. Some 16 more abstained and only Eritrea voted against condemning the invasion. In October 2022, 30 nations voted to reject Russia’s annexation of Ukrainian territories (none voted against rejection).

Some 25 African nations voted against Russia in both of these votes – Benin, Botswana, Cabo Verde, Chad, Comoros, Cote d’Ivoire, the Democratic Republic of the Congo, Egypt, Gabon, Gambia, Ghana, Kenya, Liberia, Libya, Malawi, Mauritania, Mauritius, Niger, Nigeria, Rwanda, Seychelles, Sierra Leone, Tunisia and Zambia. Significantly these include most of Africa’s more advanced democracies.

The leading importers of Russian weapons on the continent are Algeria and Sudan (both of which abstained in both votes), Angola (which abstained in the first vote, but voted against Russia in the second), and Egypt (which voted against Russia in both votes). Abstention may not always represent approval of Russia’s actions, but in some cases may signify a desire to demonstrate a nation’s tradition of non-alignment by refusing to be drawn into voting.

Russia’s most consistent supporters have been the Central African Republic, Mali, and Sudan, all of whose leaders were brought to power (and kept there) by Russian arms and mercenary support. ▲

**EGYPT INTERNATIONAL AIRSHOW** 2-5 SEPT 2024

El Alamein International Airport  
DEFENCE | SPACE | COMMERCIAL

# THE GATEWAY TO AEROSPACE IN AFRICA & THE MIDDLE EAST

**2-5 September 2024**  
El Alamein International Airport

DISCUSS YOUR PARTICIPATION:  
sales@arabianworldevents.com

Officially Supported by:

Ministry of Defence  
Egypt Air Force  
وزارة الطيران المدني  
Ministry of Civil Aviation

Media Partner: **AFRICAN AEROSPACE**

Organised by: **Arabian World Events**

@egyptairshow  
 www.egypt-air-show.com

Vince Goncalves, regional vice president Africa at ExecuJet MRO Services spoke to Keith Mwanalushi about new Embraer certifications in Africa, and navigating the supply chain quandaries in the market.

## MALAWI EASES THE PRESSURE ON EXECUJET

In July, the Malawi Department of Civil Aviation certified ExecuJet MRO Services Africa to perform line and heavy maintenance on Malawi-registered Embraer ERJ-135 and Embraer ERJ-145 commercial regional jets, as well as their derivatives, the Embraer Legacy 600 and 650 business jets.

This latest certification allows the MRO company to penetrate additional African markets and cater for those flying into different parts of Africa. ExecuJet is based at Johannesburg's Lanseria International Airport and provides predominantly line and heavy maintenance.

"We are also responsible for drop-in maintenance for visiting customers as well as the local business jet market," Goncalves told *African Aerospace*.

Looking at the post-pandemic landscape, Goncalves said strong demand for parts has unfortunately caught up with some suppliers and demand had grown at a pace far more than expected. "As business jet flying recovers post-pandemic and creating more flying hours, it has resulted in aircraft requiring maintenance more frequently, placing pressure on parts suppliers to meet the demand," he observed.

□□□□□

Globally, post-pandemic supply chain disruptions have led to cost rises in MRO services and Goncalves pointed to a similar situation in African markets. He said the demand had increased substantially, and some suppliers were unable to keep up with this demand. "Parts supply as well as some OEM repairs, for example, landing gears, are taking longer due to the demand. Lead time on parts and turnaround times on OEM overhauls and repairs have also increased over the past two years," he said.

Recently, several MRO companies on the continent have reported that provisioning of spares, material and repair services have faced major challenges that ended up with prolonged turnaround times (TATs) and affected the availability of aircraft and engines for operation.

African-based MRO organisations are facing the same aviation supply chain problems as other global regions and will need to adapt to smart solutions in times of disruptions and complexities.

ExecuJet MRO Services Africa is also certified by other civil aviation regulators such as Angola, Botswana, Mozambique, Namibia, Nigeria and Zambia and has a team of trained maintenance technicians and engineers who have extensive multi-OEM experience. However, technical skills to meet MRO demand are generally in short supply.

Goncalves is managing the situation with a proactive



Vince Goncalves: "ExecuJet is now an Embraer authorised service facility (ASF)." PICTURE: EXECUJET

approach to continuously training and upskilling engineers. "However, unfortunately, many key players, such as us, face challenges as trained engineers get poached to service other MRO requirements.

"The impact on our business is concerning as we lose skill to the industry. It is also quite disheartening as our investments are high in training these engineers. It is far cheaper for MRO facilities to poach engineers by offering higher salaries than having to train them overseas, which often results in huge monetary investments," he explained.

□□□□□

ExecuJet have managed to contain the impact so far with continued training over the years to maintain the current capability and provide the services operators are expecting.

"Going forward, we will enhance our apprentice training programme and proactively create local skills that will service the aviation industry in Africa. This is something we've done for many years successfully. Many of these youngsters are now fully-licensed quality engineers and we are very proud of this," he added.

The ability to train and find technical jobs locally is vital in developing the MRO sector, considering some are struggling to find work outside the continent. This is partly thanks to the global shortage due to misalignment on regulation, mostly from one country to another.

Aviation recruiters have suggested that in some circumstances it's possible to have training qualifications and certificates 'validated' to allow the transition of a worker from one jurisdiction to another, but again this is quite restrictive, for example when considering bringing skilled workers to Europe. ▲

▼ Many key players, such as us, face challenges as trained engineers get poached to service other MRO requirements. ▲ VINCE GONCALVES

## Complex Supply Chain?

We are your nose to tail solutions provider



AJW®

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

# Your family trip is now on safe wings

Worry free trips start with our Travel Insurance

#InsureYourDreams

rwandair.com



(+250) 788 177 000  
reservations@rwandair.com



## MANUFACTURING

### FABRICATION

The engine manufacturer Pratt & Whitney will launch Pratt & Whitney Maroc (PWM), an independent affiliate in Casablanca, to manufacture static and structural machined parts for various engine models part of its expansion plan. **Anuradha Deenapanray Chappard** reports.

## P&W TUNES IN TO AFRICA WITH MOROCCAN ROLE

**A**frica is an important market with a huge growth potential in aerospace. And, Morocco is "an obvious choice" for such a strategic investment for Pratt & Whitney, a Raytheon Technologies business, to expand and support aerospace growth in the region.

"We look forward to breaking ground on that project and bringing it to fruition", Shane Eddy, president of Pratt & Whitney, told *African Aerospace*.

This key investment was announced at the Paris Air Show in Le Bourget. The new facility will produce engines to meet strong demand and will bring Pratt & Whitney closer to its African customer base and partners.

It is part of the company's strategy to develop cost-effective sourcing capabilities for competitiveness and to optimise operations footprint and asset utilisation.



"Morocco offers many benefits for aerospace manufacturing," said Maria Della Posta, president, Pratt & Whitney Canada, during the announcement. "The growing aerospace community in Casablanca ensures a highly valuable talent pool, a positive economic environment, and the support from Morocco's government."

The kingdom, which has been investing enormously in the aerospace industry, was chosen after a global benchmarking exercise as it is a growing hub offering incentives to new businesses as well as recognised know-how and highly-skilled human resources.

According to the Moroccan Ministry of Investment, Convergence and Evaluation of Public Policies (MICEPP),

### SOMMAIRE

#### PRATT & WHITNEY OUVRE UNE FILIALE AU MAROC

Le motoriste Pratt & Whitney lancera Pratt & Whitney Maroc (PWM), une filiale indépendante à Casablanca, pour fabriquer des pièces usinées statiques et structurelles pour différents modèles de moteurs dans le cadre de son plan d'expansion. Un reportage de **Anuradha Deenapanray Chappard**.

L'Afrique est un marché important avec un potentiel de développement dans l'aéronautique. Et, le choix du Maroc pour cet investissement stratégique était évident pour Pratt & Whitney qui fait partie de Raytheon Technologies dans le cadre de son projet d'expansion. « Nous sommes impatients de lancer ce projet et de le mener à bien jusqu'au bout », a déclaré Shane Eddy, président de Pratt & Whitney, à African Aerospace.

Cet investissement d'envergure a été annoncé lors du Salon de l'aéronautique du Bourget. La nouvelle usine produira des moteurs répondant à une forte demande et rapprochera Pratt & Whitney de sa clientèle et de ses partenaires africains.

« Le Maroc offre de nombreux avantages pour

la production aéronautique », a déclaré Maria Della Posta, présidente de Pratt & Whitney Canada lors de l'annonce. « La communauté aérospatiale en pleine croissance à Casablanca garantit un important vivier de talents, un environnement économique favorable et le soutien du gouvernement marocain. »

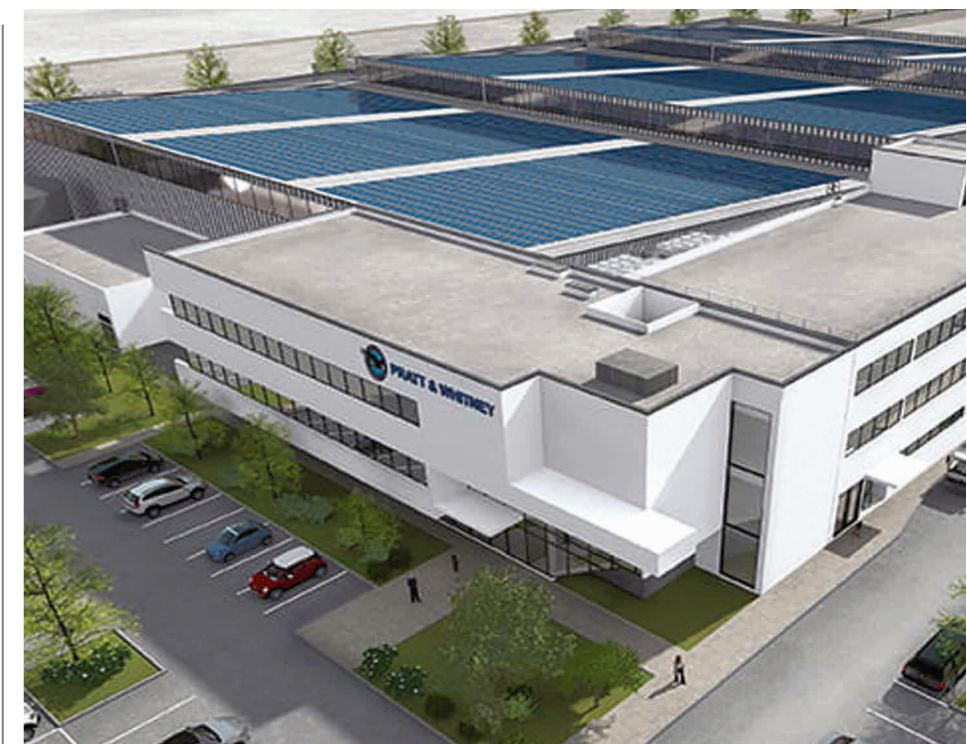
Le Royaume, qui investit énormément dans l'industrie aéronautique, a été choisi après un exercice d'analyse comparative mondiale, car il s'agit d'un hub en pleine croissance, offrant des incitations aux nouvelles entreprises de même qu'un savoir-faire reconnu et une main-d'œuvre hautement qualifiée.

Selon le ministère marocain de l'Investissement,

de la Convergence et de l'Évaluation des Politiques Publiques (MICEPP), cet investissement renforcera l'écosystème aéronautique du pays, en favorisant l'innovation, la recherche et le développement de nouvelles technologies.

Le nouveau site 'greenfield' de 12.075 m2 sera installé dans la zone franche MidParc de Casablanca, conformément à la stratégie de durabilité de la compagnie. Selon Pratt & Whitney, les travaux de construction débuteront fin 2023 pour un lancement prévu en 2025. Ils suivront « les principes lean et la méthodologie CORE pour stimuler l'efficacité et la qualité, et réduire les coûts ».

Le site créera 200 emplois d'ici 2030.



**MOROCCAN BASE: P&W's vision for the future through this Casablanca rendering**

PICTURE: PRATT & WHITNEY

this investment will strengthen Morocco's aerospace ecosystem by fostering innovation, research, and the development of new technologies.

The new greenfield 130,000 square feet facility will be set up in Casablanca's Midparc free zone in line with the sustainability strategy of the company.

According to Pratt & Whitney, construction works will start at the end of 2023 for an expected launch in 2025. They will follow "lean principles and CORE methodology to drive efficiency and quality and reduce costs".

The facility will create 200 jobs by 2030.



**Francisco Lopez:** "The A220 offers widebody comfort in a single-aisle aircraft." Right: The A220. PICTURES: AIRBUS

## Africa ready to capitalise on the A220 comfort zone

The Airbus A220 – previously known as the Bombardier CSeries – is now making an impact and has African airlines in its sights. **Kaleyesus Bekele** reports.

Airbus Canada Limited Partnership is owned by Airbus, and its partner Investissement Québec (acting for the government of Québec). It employs approximately 3,000 staff at its headquarters and manufacturing facilities in Mirabel with a second manufacturing facility serving US customers in Mobile, Alabama.

With a total of three production lines Airbus is currently producing six A220s every month. By the middle of the decade it anticipates boosting monthly production to 14.

With two variants -100 and -300 the A220 aircraft is designed to serve the 100-150-seat market segment.

Francisco Lopez, head of A220 customer engineering, says the A220 is the most fuel-efficient single-aisle jetliner. "It uses 25% less fuel than previous generations and has 254% lower carbon emissions," he said. "Sustainability is at the heart of the A220 aircraft design."

The A220 programme was created in 2018 after Airbus acquired the CSeries programme from Bombardier. Airbus is now celebrating the fifth anniversary of the A220 programme as the aircraft is celebrating the 10th anniversary of its first flight (C Series) this Autumn.

Air Senegal, Air Tanzania, Egypt Air and Nigerian Ibm Air are operating the A220 aircraft in Africa. "Because of the efficiency and performance, the aircraft attracted interest from around the world. Our customers are diversified – lessors, startups, low-cost and legacy airlines," Lopez said.

The A220 programme has more than 100 suppliers around the world. From Africa, Morocco supplies part of the fuselage, while China supplies the main fuselage. Belfast supplies the composite wings, while the landing gears are imported from Germany. Leonardo of Italy supplies the aircraft's vertical and horizontal stabilisers, while the cockpit is manufactured in Mirabel.

According to Lopez, the A220 has the most efficient aerodynamics due to its optimised cross section and

optimised aerodynamics of the nose, wing and tail.

It is powered by the Pratt & Whitney PW1500 geared turbofan (GTF) engine, which was originally designed for the A220 and adopted for the A320 NEO family.

According to Lopez, extensive use of composite materials and advanced metal alloys allows for a lightweight design.

The fly-by-wire system is developed by Parker Aerospace, while the avionics are supplied by Collins Aerospace. Panasonic delivers the cabin management system.

"With a five-abreast cross section, the A220 offers widebody comfort in a single-aisle aircraft," Lopez remarked. "In terms of comfort, A220 has large windows that are 28 by 40.6cm (11 by 16 inches) wide – equivalent to the windows of the Boeing B777 aircraft."



The A220 variants -100 and -300 have more than 99% parts commonality. "In terms of flight crew training, pilots can switch from one aircraft to another and fly the same day. The main difference in size is the -300 has a 3.7m longer fuselage. The commonality gives airlines great flexibility in their operations," Lopez said.

With a range of 3,450nm in the 100-150 seat market segment, the A220 is relevant to the African market. Lopez said an African airline operating from Addis Ababa could cover most of the destinations in Africa and the Middle East. "From Johannesburg, you can cover most of the destinations in Africa. African and other airlines can tap into this huge potential," Lopez said.

Several African carriers including Ethiopian Airlines are evaluating the A220.

Pratt & Whitney said current time on wing for GTF engines varies significantly depending on mission and operating environment, with operators in hotter, sandier environments experiencing reduced intervals between maintenance visits. ▲

# CALIPHATE

AVIATION TRAINING CENTRE



Caliphate Aviation Training Centre is a subsidiary of Caliphate Aviation Handling Services Limited, an aviation service provider/consultancy company with a well-equipped training center designed to offer various aviation technical and management-related courses.

Our training center is based in Kano, Nigeria, a five-minute drive from the Malam Aminu Kano International Airport (MAKIA). Kano is the commercial center of northern Nigeria and the most populated state in Nigeria. Historically, it was the first state to witness the first aircraft landing in Nigeria in 1925 and still stands as a transit stop for thousands of passengers connecting to various international destinations around the world.

With the ever-increasing demand for air transportation, the passion for aviation is becoming a growing dream needed to be achieved by the younger and upcoming generations. For this reason, we were able to organize a kids and youths aviation program. This involves classroom lessons for kids and lectures for youths on aviation with the help of visual aid, pictures presentation via slide shows, tour visits to the airport, and industrial training (IT), which

will give students the opportunity to experience the working environment through work placement, industrial visits, guest speakers either from the service providers, security agencies, or regulators in the industry, classroom simulation, and practical assignments. Recently, the school acquired a B747-200 cockpit for students to have a feel and touch. The training center was also able to acquire a lot of aircraft parts to put on display in the school as part of the simulation exercise keeping to IATA and ICAO standards.

Caliphate Aviation Training Centre recently signed an MOU with the Nigerian College of Aviation Technology Zaria (NCAT), which is the only government-owned Aviation institution in Nigeria approved to organize and carry out training on our facility. We will work closely with the department in charge of training at the Nigerian Civil Aviation Authority (NCAA). We have reached out to Airbus to partner with us as regards its STEM (science, technology, engineering, and mathematics) program and its Aviation College for upgrade courses in aviation. At the same time, we have also contacted Boeing regarding their Education Resource program for preparing the next generation of aviators.



### CONTACT DETAILS

**Address:** Gidan Abubakar Maikore, Opposite Baban Gwari House, Murtala Muhammed Way, Kano-Nigeria

**Phone no:** +234 8032285052 | +234 8136783030  
+234 8065463076 | +234 7085900300

### SOCIAL MEDIA HANDLES

**Instagram:** caliphate.aviation  
**Twitter:** Caliphate\_avi  
**Facebook:** @caliphate.aviation  
**Website:** [www.caliphateaviation.com](http://www.caliphateaviation.com)  
**Email:** [info@caliphateaviation.com](mailto:info@caliphateaviation.com)  
[caliphateaviationservices@gmail.com](mailto:caliphateaviationservices@gmail.com)

## ▲ ALL IN A DAY

# Nkechi Onyenso

Marcelle Nethersole speaks to the CEO of Pathfinders International.

### What does Pathfinders do and what services does it provide?

Pathfinders International has been operating in Nigeria as a fully-registered entity that provides a comprehensive service as regards aviation security.

We are contracted to some local, regional and international airlines to provide support services covering areas such as travel document screening, passenger profiling and crowd control, baggage escort and screening, aircraft security and surveillance, export/import cargo, mail escort and screening, clearing and forwarding, escort movement, catering security, X-ray screeners and security consulting amongst others.

We serve in more than 15 airports in Nigeria, and also Ghana.

We are licensed to provide services in Liberia and Sierra Leone, as well as work as a GSA for new airlines looking to start up in any of the countries we currently operate. If that is not enough, we are also licensed as a clearing and forwarding company, and licensed to provide static guard services.

### What challenges does the company face with security within Africa?

The whole world is very particular about aviation security and Africa is no exception.

We have been fortunate to have professionals handle, supervise and manage all aspects of our aviation security in Nigeria so we have very minimal (if any) serious breaches.

At Pathfinders, our motto is "trusted service" and we have structures in place to ensure that is what we do. The pillar of which is training and retraining and our privilege of having operations in a number of locations, which allows us to be a step ahead at all times. Remember, we are – Pathfinders!

At Pathfinders, our motto is "trusted service" and we have structures in place to ensure that is what we do.

### What is your goal for Pathfinders International?

We are already the best aviation security services company in West Africa, we are now set to explore other parts of Africa and beyond.

Also, we have other aviation-specific services brewing to be announced at the appropriate time.

### How have you found it playing in a male-dominated field?

Well, I must confess, it has been quite interesting. I guess God was preparing me for this when he made me the first female registrar and CEO of another organisation after 50 years of its existence sometime in the mid-2000s.

Being the only woman MD in a male-dominated sector means you will have to work harder and smarter. But permit me to quickly add, that professionalism and integrity has no gender.

I personally do not believe that women should be offered the job just because they are women, there are other ways to achieve balance and equality if that is the sole objective; I believe women should be offered the job because we are skilled, trained and provide the right balance to ensure the growth and stability of any organisation.

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

Thankfully, I don't have a typical day and that's why I love what I do!

The day can change quickly depending on what is happening in operations. So I may be scheduled to be in the office, but called to the airport or one of our clients' facilities. I may be scheduled to be in Lagos, but my attention will be urgently needed in Abuja, Accra or any other place and so my day changes.

With the technicality of the job, the number of clients, our cocktail of services, the various locations where we work (more than 15 airports in Nigeria) and the number of colleagues I have to deal with daily, there is nothing like a typical day for me!



PICTURE: PATHFINDERS INTERNATIONAL

# THE FUTURE OF THE AEROSPACE INDUSTRY

REGISTER NOW



USE CODE: TA15

Attracting the biggest players in the aerospace, space and defence industry, Dubai Airshow 2023 is all set to be another world-class edition for the industry's trailblazers and innovators to showcase, identify future trends and opportunities and close winning deals.

BOOK YOUR SPACE TODAY | [sales@dubai.aero](mailto:sales@dubai.aero)

[www.dubaiirshow.aero](http://www.dubaiirshow.aero) | [f](#) [in](#) [@](#) [t](#)



13-17 NOVEMBER 2023  
DWC, DUBAI AIRSHOW SITE

Strategic partners:

Supported by:

# A350. PIONEERING INNOVATION AND COMFORT



Offering the ultimate passenger experience even on the longest of flights, the A350's innovative design delivers an enhanced passenger experience, a smooth ride and increased efficiency for operators. With cutting-edge aerodynamics and 70% advanced materials, the A350 has been a cost-effective and durable addition to the widebody market since 2015.

**AIRBUS**