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comment & contents A

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Mark Brown

Display Advertising:

Grant Lee grant.lee@time

Circulation Dept: Clare Brown

Editor-in-Chief

Editor: Steve Knight steve@knighttrain.co.uk

Editorial head office:

Norths, Rectory Road, Orsett, Essex

COVER:

Astral Aviation CEO, Sanjeev Gadhia, discusses the Kenyan freight carrier's new partner airline in South Africa and his plans to create three more cargo airlines in Europe, the Middle East and Australia. PICTURE: BILLYPIX

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Why safety must be back in the spotlight

afety is back on our African agenda, having been out of the limelight as health took centre stage over the past couple of years.

Africa has seen a remarkable improvement in its overall safety numbers over the past decade and, across the sectors, there has been a solid emphasis on safety

Organisations like AviAssist are working tirelessly to get sponsored scholarship programmes under way across the continent, as we see in this issue.

But there is a pressing need to pull it all together, from airports (see the excellent interview with Harriet Nakazwe Angetile, the first female elected vice president of the safety and technical committee at Airports Council International Africa) through to airlines.

This year's global safety review from the International Air Transport Association (IATA) showed Africa's aviation still has challenges to deal with.



As global air traffic headed back towards normal numbers, just a third behind the 2019 figures but 25% up on 2021 total, there was reassuring news for air travellers - just five accidents in 2022 resulting in fatalities, compared with seven in 2021.

That led to an amazing statistic: A person taking one

flight every day would need to fly for 2,263 years before experiencing an accident.

Africa's IATA-registered airlines jet fleet was again free of accidents and, overall, there were some improvements. However, Africa still had the highest accident rate in the world with 8.70 accidents per million sectors in 2022. This was up from 5.66 per million sectors in 2021, and was also above the five-year average of 5.68 accidents per

Turboprop operations are the largest concern.



"Both sub-Saharan Africa and Latin America saw increases in turboprop accidents last year. Introduction and adherence to global standards (including IOSA) are key to reversing this trend. The priority for Africa continues to be the implementation of the International Civil Aviation Organization (ICAO) safety-related standards and recommended practices (SARPS)," said IATA director general Willie Walsh.

Sensible conversations about safety management plans and processes, as well as the value of IOSA, must be undertaken, and the turboprop community needs to work together to better understand what can be done to clean up Africa's safety reputation once and for all.

Alan Peaford, editor-in-chief









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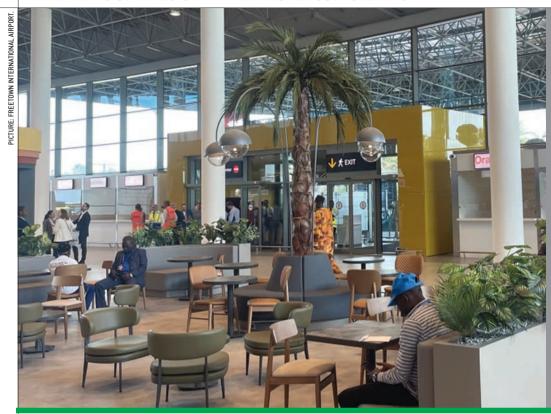
Danny Vranckx, CEO of Aviaco GSE.

F REPORTAGE EN FRANCAIS



BUSINESS BRIEF

DAILY NEWS UPDATES ON WWW.TIMESAEROSPACE.AERO



Sierra Leone hails new terminal

Freetown International Airport, locally known as Lungi International Airport, in the coastal town of Lungi, Sierra Leone, has opened a new terminal.

The new facility is three times the size of the airport's existing terminal and will be able to handle up to 90,000 passengers per month and eight widebody jets simultaneously.

body jets simultaneously.

The terminal has also been developed with sustainability at its core with all its power needs met by a 1.5MW solar farm.

This marks the first time that a

This marks the first time that a completely new international airport terminal has been constructed since the country gained independence in April 1961.

Sierra Leone president, Julis Maada Bio, said: "Today is a great day, a new day for all of us. This terminal has the latest technology and the highest compliance standards to make it attractive to more international airlines."

Uganda boost

Uganda Airlines has reinstated a fifth weekly flight between Entebbe and Johannesburg to cater for the increasing demand on the route. The number of passengers flying between Entebbe and Johannesburg has increased by more than 1,000% compared to Q1 2022.

The airline will operate the Bombardier CRJ900 on this route.

\$13m contract

Indra has won a \$13 million contract to equip the new M'Banza Congo Airport in Angola with ground and air systems.

The Spanish information technology and defence systems company said the digitisation of the infrastructure and the automation of the processes will facilitate optimal and streamlined management, minimising the risk of human error, offering a better experience to travellers, reducing waiting times for both

passengers and aircraft, and, thus, reducing polluting emissions.

Cargo setback

The International Air Transport Association (IATA) has reported that African airlines saw cargo volumes decrease by 9.5% in January 2023 compared to January 2022. This was an improvement in performance compared to the previous month (-10%). Capacity was 1.8% below January 2022 levels.

Spreading wings

Qatar Airways is gearing up for growth in Africa, establishing new routes and increasing frequencies on others.

Africa is among the fastest-growing aviation markets, with the sector expected to be valued at \$400 billion by 2040, and with annual increases in passenger traffic of 5.4%.

To meet this projected demand, Qatar Airways has this year added more flights on the Doha,

Lusaka, Harare route and is now flying daily, up from three weekly services.

Cape Town has grown from 10 flights a week to double-daily and the airline has also begun daily flights to Accra in Ghana.

Karachi launch

Ethiopian Airlines will launch direct flights to Karachi, Pakistan from May 1, 2023.

Ethiopian Airlines CEO, Mesfin Tasew, said: "As the only flight connecting Pakistan with Africa, the planned service to Karachi will make a significant contribution in strengthening the diplomatic and economic relations between the two regions. It will also offer convenient air connectivity to the growing number of Pakistani investors in Africa, as well as tourists."

The carrier resumed its services to Kuala Lumpur, Malaysia, in late March using a B787 Dreamliner operating four times a week.



John Kelly:
Spent six years
as senior vice
president of
Europe, the
Middle East and
Africa for the
group's civil
aerospace
business.
PICTURE: ROLLS-ROYCE.

Rolls-Royce appoints Kelly as Africa president

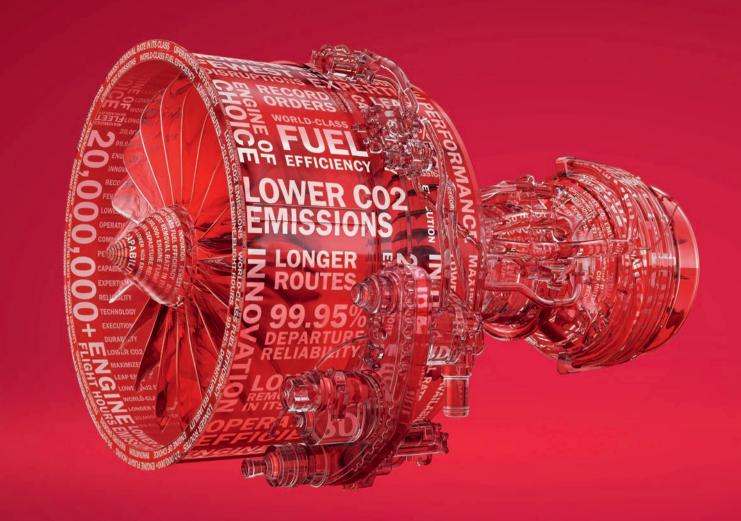
Rolls-Royce has appointed John Kelly as president – Middle East, Turkey, and Africa (META), with immediate effect.

Before this role, Kelly spent six years as senior vice president of Europe, the Middle East and Africa for the group's civil aerospace business.

Rolls-Royce Civil Aerospace serves more than 20 African airline customers across 15 countries.

The company claims more than half the market share in powering the African wide-body aircraft market, with engines installed on in excess of 80 wide-body aircraft in service and another 30 on order.

Since 2017, the company has supported the inception of three new airlines. It also powers a large proportion of the regional aircraft market, with more than 95 aircraft in service.



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Bell Textron delivers Bell 429 to Africa

Bell Textron has delivered a Bell 429 and signed a purchase agreement for another similar aircraft, both to customers in Africa.

"We are proud to support our customers in Africa. With two now operating in South Africa and a third one soon to be in west Africa, the aircraft continues to excel across the many market segments for which it was designed," said Sameer Rehman, managing director, Africa and the Middle East, Bell.

Caverton Helicopters in Cameroon signed a purchase agreement for the first oil and gasconfigured Bell 429 in west Africa.

"Having operated a variety of Bell products across our operations over the years, we are excited to continue with this brand, which is synonymous with safety and excellent performance," said Captain Bello Ibrahim, managing director, Caverton Helicopters.



Zimbabwe boost

Fastjet Zimbabwe has welcomed an Embraer 120 aircraft to its Harare base.

The arrival of the first of three 30-seater Embraer 120s is in preparation for the airline's plans to operate domestic flights to Kariba and Hwange National Park in Zimbabwe.

These new routes will bring to five the domestic destinations that Fastjet operates in Zimbabwe. The others are Harare, Victoria Falls and Bulawayo.

Graduating upwards

Ethiopian Aviation Academy has been upgraded to an aviation university. The university has launched undergraduate and postgraduate programmes in aerospace and hospitality fields.

The academy had been offering aviation training programmes for pilots, aircraft technicians, cabin crew, airline sales and services, and other related fields.

Since being upgraded to university level, it has launched degree programmes, including a BSc in aeronautical engineering, a BSc in aircraft maintenance engineering, a BSc in aviation management, a BA in tourism and hospitality management, and an MBA in aviation management.

Runway closure

The Federal Airports Authority of Nigeria (FAAN) has announced an eight-week closure for maintenance of runway 18R/36L at Lagos Murtala

Airport biggest

ion First for Africa

EgyptAir took delivery of its first A321neo from Airbus' Delivery Centre in Hamburg in February, making the airline the first African operator of the aircraft.

The A321neo, on lease from AerCap and powered

Muhammed International Airport (LOS) – Nigeria's biggest and busiest airport.

aisle capacity to the Middle East, Africa and Europe. The delivery flight from

by CFM engines, will

increase the airline's single-

The delivery flight from Hamburg to Cairo was powered by a 34% sustainable aviation fuel (SAF) blend.

The aircraft joins EgyptAir's Airbus fleet of 12 A220s, eight A320neos, two A320ceos, four A330-200s, and four A330-300s.

Fighting the good fight: Florence Bore, cabinet secretary for Kenya's ministry of labour & social protection, and Kipchumba Murkomen, cabinet secretary, ministry of roads and transport, were among the attendees at the Kenya Airways policy launch.



Kenya launches anti-trafficking campaign

Kenya Airways has launched its trafficking in persons (TIP) policy and public awareness campaign in collaboration with the United Nations Office on Drugs & Crime (UNODC). The policy, which came into effect in January 2023, outlines the airline's stand and actions against human trafficking.

The public awareness and outreach campaign is designed to educate Kenya Airways staff and the public about the realities of human trafficking and how to identify and report suspected cases.

Kenya Airways chief financial officer, Hellen

Mwariri Mathuka, said: "We stand against all forms of human trafficking, fully support the elimination of the exploitation of human beings and modern slavery, and will not condone human trafficking in any part of our organisation.

"We have invested in capacity-building programmes to give our employees the tools to identify and report suspected cases of human trafficking because we recognise that our employees at the airport and on flights are uniquely positioned to look out for this type of crime."

Emergency landing

A Condor Airlines flight had to make an emergency landing at Mauritius International Airport after it was caught in severe turbulence en route from Frankfurt, Germany.

At least 17 passengers were injured, two of them seriously. An emergency team evacuated them to the nearest hospital.

The aircraft, with 270 passengers on board, had been caught in the turbulence while flying near Madagascar, two hours out of Mauritius.

Zanzibar link

South African low-cost carrier (LCC) FlySafair, has announced a new regional route between OR Tambo International Airport and Abeid Amani Karume International Airport in Zanzibar.

The airline will start offering a weekly return flight from this month with the possibility of a second weekday flight to be added.

Traffic increase

African airline traffic rose 124.8% in January 2023 against a year ago. January capacity was up 82.5% and the load factor climbed 13.9 percentage points to 73.7%.



BUSINESS BRIEF

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RwandAir fleet expands

RwandAir has expanded its fleet with the delivery of its third wide-body long-haul aircraft from Airbus.

The new A330-200 will allow the Rwandan carrier to operate additional flights between Europe, the Middle East and Africa.

Yvonne Makolo, RwandAir CEO, said: "The aircraft will allow us to offer customers even more connections."

RwandAir will operate the new aircraft to key destinations, including London, Brussels, Lagos and Dubai.

The addition of the new Airbus brings the carrier's fleet to 13 aircraft, including three long-haul, one freighter and nine short-haul aircraft.

AFRAA signs Kenya MoU

The African Airlines Association (AFRAA) has signed a memorandum of understanding (MoU) with the Kenya Association of Air Operators (KAAO) to support the country's sustainable development of aviation. AFRAA Secretary General, Abdérahmane Berthé, said: "There are some country-specific opportunities and challenges for the airline industry in Africa that vary from country to country.

"This approach is a building block to AFRAA's mission for a sustainable, interconnected and affordable air transport industry in Africa."

Grounds for optimism

The International Air Transport Association (IATA) and Afroport Mauritanie have signed an agreement to enhance the safety of ground operations in Mauritania.

It will focus on two critical global standards – the IATA ground operations manual (IGOM) and the IATA safety audit for ground operations (ISAGO).

Under the programme, Afroport Mauritanie will promote the adoption of IGOM by ground handling service providers (GHSPs), it will make ISAGO registration and station accreditation a condition for GHSPs to operate at the airport, and, together with IATA, it will monitor safety performance.



Fuelling Africa's second century of aviation talent

The AviAssist Foundation has launched the ATR course scholarship programme for future and young aviators in Africa. The scholarships enable young aviation professionals to access one of the AviAssist safety courses in Africa for free.

The foundation's priority is to fuel Africa's second century of aviation safety talent and innovation by providing access to professional development opportunities to promising students.

Tom Kok, director of the AviAssist Foundation, said: "Our partnership with ATR is an exceptional opportunity for students.

"Often, our courses will be the first opportunity for these youngsters to gain access to short professional development training and engage with professionals from across Africa."

Course scholarships will be awarded to young professionals from the country that hosts an AviAssist event.

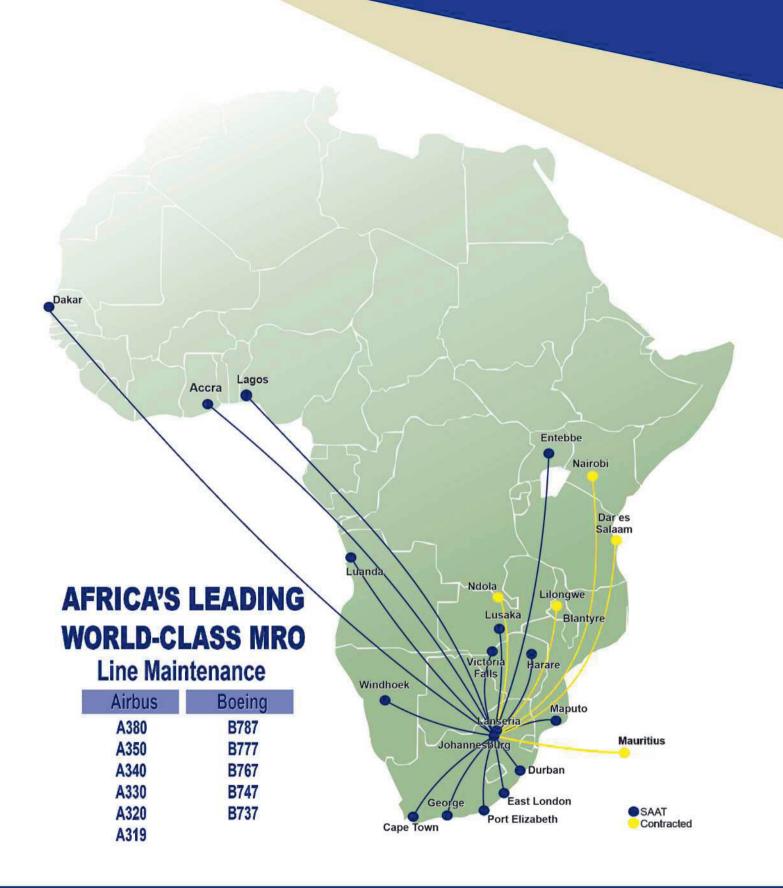
Propping up safety

Turboprop operations in Africa and Latin America are coming under the microscope after the International Air Transport Association (IATA) released its 2022 safety report for global aviation.

The report showed a global reduction in the number of fatal accidents – down from seven to five – compared to 2021.

Turboprop accidents declined in 2022 but they still accounted for four of the five fatal crashes. Sectors flown by turboprops represented just 10.6% of the total, but they were involved in 36% of all accidents, 80% of fatal accidents, and 16% of fatalities in 2022.

"Both sub-Saharan Africa and Latin America saw increases in turboprop accidents last year," said IATA director general Willie Walsh. "Introduction and adherence to global standards are key to reversing this trend. The priority for Africa continues to be implementation of the International Civil Aviation Organization (ICAO) safety-related standards and recommended practices (SARPS)."





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THE ASTRAL STAR IS RISING

Kenyan all-cargo carrier,
Astral Aviation, is expanding
its footprint, with the
establishment of a new
partner airline in South Africa
and plans to create three more
cargo airlines in Europe, the
Middle East and Australia.

Victoria Moores reports.

ccording to Astral Aviation CEO, Sanjeev Gadhia: "A lot of things are falling into place." Last year, Astral helped to launch a

new Indian cargo carrier, Pradhaan Air Express, providing the start-up with the world's first A320P2F.

A second Astral A320P2F aircraft will join Pradhaan Air Express' fleet this year and Gadhia is evaluating A321 and A330-300 freighters for the new carrier. "We are looking at maybe taking a stake in the airline in the next couple of months." he said.

Then, in February this year, Astral announced that it would be supporting Johannesburg-based start-up Suid Cargo, which will launch using one of Astral's Boeing 727-200 freighters from the second quarter of 2023.

After helping to set up these two air operator's certificates (AOCs), Gadhia is now looking to divest some of his 70% stake in Astral to raise money for new AOC ventures in Europe, the Middle East and Australia. He plans to retain at least 51% of Astral, to comply with Kenyan ownership requirements, with unnamed strategic investors taking a 40-45% shareholding.

"We've been in talks with several strategic players who are interested in investing in Astral," Gadhia said. "They have also shown an interest in investing in our vision of setting up AOCs. They like what they hear from us."

Nairobi-based Astral is a mature airline, with 22 years' experience under its belt. The company operates a Fokker F27, three Fokker 50s, a McDonnell Douglas DC-9, two Boeing 727-200Fs, two 757-200Fs, a 767-200F, and two 747-400Fs, with confirmed plans to take two 767-300Fs this year, followed by a pair of Embraer E190Fs in 2024-2025.

"We're planning to retire the Boeing 747s that we have by the end of 2024 so that, in 2025, we can start a new chapter with 777s," Gadhia said. Negotiations are under way for two 777-



300ERFs in 2025, followed by another two in 2026, which would be used to carry perishables from Nairobi to Europe, including the UK and Belgium.

However, this year, Gadhia's main focus will be on setting up Suid Cargo. South Africa has a 25% foreign-ownership cap on airlines with domestic operations, so Gadhia himself owns a quarter of the new venture, alongside local South African investors.

"The reason why we decided to set up an airline in South Africa is because of the demise of SAA Cargo, which was a very dominant player in southern Africa," Gadhia explained. "We've decided to operate [Suid Cargo] for the next six months on a wet-leased aircraft, because the outlook for freight in southern Africa is really bad at the moment."

espite the current downturn, South Africa has the strongest economy in Africa and Johannesburg is a well-established air cargo hub. Suid Cargo will initially test the water with cargo charter flights, bringing in Astral's 757Fs, 767Fs and 747-400Fs as needed, before expanding into scheduled and domestic operations from 2024.

Gadhia has been working on the project since 2021 and he hoped to secure Suid Cargo's licence by November 2022, but the confirmation letter finally came through in February 2023, just in time to reveal the start-up during Air Cargo Africa in Johannesburg.

"In 2023, I just want to focus on South Africa, on getting it up and running," Gadhia said. "We've invested a lot of money in it. And now, finally, a year later, we are actually getting ready to make it happen.

One of the first tasks will be to finalise Suid

Cargo's fleet for 2024. The Embraer E190F has been shortlisted for its domestic feeder flights and the remainder of the fleet will be made up of either A320 or 737 freighters.

"We're going to do a very detailed evaluation," Gadhia said. Astral is already familiar with the A320P2F, through Pradhaan Air, and both the A320 and 737 have strong technical support and crew availability in South Africa.

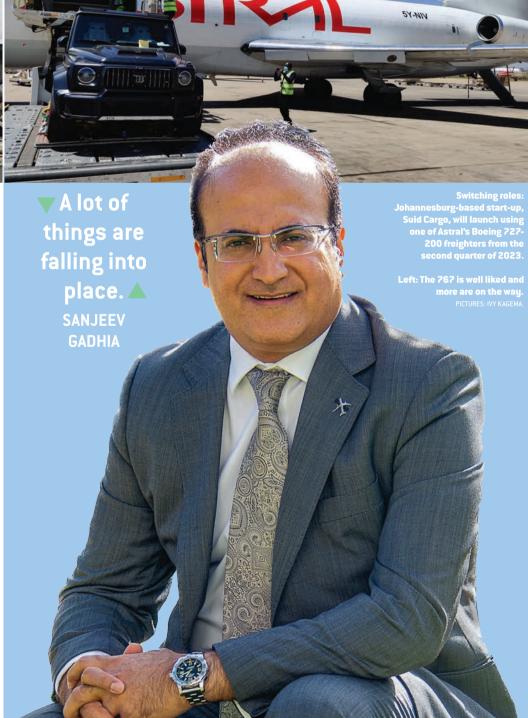
Turning to the E190F, Gadhia is definitely a fan. He pushed for the variant to be developed and was the first to commit to a pair of E190Fs at the 2022 Farnborough International Airshow. This makes the E190F a natural choice for Suid Cargo.

"Look at the coincidence," Gadhia said. "The aircraft that are eventually being converted into freighters are currently flying for Kenya Airways. So, they are actually going from Nairobi to Brazil, to be converted into a freighters, then they'll come back to Nairobi."

The E190Fs will be converted in late 2024 and could start operating for Suid Cargo from the first quarter of 2025 on domestic flights between Cape Town, Durban and Johannesburg. "The road network is not safe," Gadhia said. "Trucks are getting hijacked; there's a lot of unrest in South Africa." Air freight is a more secure way of moving goods.

Suid Cargo will offer a 'sea-air' cargo product from Durban and Cape Town, receiving freight from ships and carrying it onwards by air, reducing delivery times and costs for landlocked African countries. It plans to operate to more than 20 destinations in Angola, Democratic Republic of the Congo (DRC), Kenya, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Rwanda, Tanzania, Uganda and Zambia.

Continued on Page 12





Something new: The Embraer E190F freighter

– a rendering is shown here – will join Astral's
fleet in late 2024. Picture: Embraer.

DOUBLE 'FIRST' FOR THE ASTRAL PLANES

Becoming the launch customer for one new aircraft model is something that happens to few airlines during their existence. Kenya-based Astral Aviation is involved in the launch of two.

Alan Dron reports.

The Nairobi-based freight specialist is taking delivery of both the initial Airbus A320F and the Embraer E190F, freighter conversions of the popular passenger aircraft.

The A320, converted by Singapore's ST Engineering Aerospace Resources, was delivered by Astral and UAE freighter leasing specialist, Vaayu Aero Leasing, to India's Pradhaan Air Express in September 2022, with a second example following in March this year. Astral has a lessor relationship with Pradhaan.

The first E190Fs will be delivered to Astral Aviation in November 2024 and January 2025 by lessor, Nordic Aviation Capital, with the aircraft converted by Embraer in Brazil.

There are several reasons for Astral's involvement in two new freighter variants, said CEO, Sanjeev Gadhia.

"The A320F is an excellent narrow-body freighter, which is well-suited for India and will operate as a regional freighter covering parts of Asia. Its optimum range is four hours with maximum payload.

"The A320F will operate to and from Delhi. It is currently being used for carrying mobile phones and electronics from Hanoi to Delhi, while the E190F will focus on e-commerce and general cargoes.

"The Embraer 190F fits well as a feeder-aircraft and will operate from Astral's hub in Nairobi and will fly to destinations in east, central and southern Africa, as well as the Horn of Africa, expanding the airline's cargo footprint in Africa."

The A320F is on a six-year dry lease from Vaayu, while the E190F will be leased from Nordic Aviation Capital, launch lessor for the type.

The E190F will join Astral's varied fleet, whose capacities range from the Fokker F50 (seven tons), up to the Boeing 747-400F (110 tons).

Meanwhile, Astral Aerial Solutions, the company's UAVoperating subsidiary, plans to offer 'last-mile' delivery solutions within Africa using a range of large cargo drones, which are currently undergoing certification and regulatory approval.

The drones will enable Astral to reach inaccessible parts of the continent with humanitarian cargoes.

Payloads will be expanded to cover e-commerce and agricultural products.

PICTURE: BILLYPIX 11

▲ air transport

TRANSPORT AÉRIEN

CONTINUED FROM PAGE 10

Ultimately, Suid Cargo plans to cover southern, west and east Africa, Asia, the Middle East and Europe. The fledgling carrier will also benefit from Astral's partnerships. "We have 42 interline partners in Astral and, out of these, 30 are potential interline partners for us in South Africa," Gadhia said.

Astral will also gain from its relationship with Suid Cargo, using its four weekly Nairobi-Johannesburg frequencies to feed the new airline, rather than operating onward fifth-freedom flights itself.

"Instead of us flying from Johannesburg to Lusaka, or to Mauritius, we would just give the cargo to our small brother," Gadhia said. "For example, I would not fly from Nairobi to Windhoek; I would just remove that from my network and give it to the guys in South Africa. So, if anybody has cargo for Windhoek and let's say it's in Beijing, or Perth, they don't need to bring it to Nairobi, they can send it straight to Johannesburg."

Astral has a sizeable operation from its Nairobi home base, as well as a west African hub in Lome, Togo. "We've always had this philosophy that you cannot have one hub in Africa. You need to have three hubs at least, because of the [directional] nature of cargo," Gadhia said.

This loops back to Astral's wider expansion plans and investing in new partner airlines outside of Africa.



"Starting an AOC from scratch is very important. I don't believe in taking over airlines, because you find hidden skeletons," Gadhia said. "Definitely Europe, Australia and the Middle East are also in our strategic plans, but we have to make sure that the end connects with Africa. If there's no connection with Africa, then it really doesn't serve any purpose because the heart [of Astral] is in Africa."

The European AOC is likely to come first, in 2025, with Ireland and Malta under consideration. The Middle East AOC will follow, around the same time.

"We also looking at Australia as a market. We believe that there's a huge potential in Australia for air cargo: Australia, New Zealand, parts of Asia. So this is an area that we also looking at," Gadhia said.

Foreign AOCs will give the new airlines better access to traffic rights, a large pool of qualified

crews, and established maintenance support.

Astral's Kenyan AOC is also becoming "very heavy" with aircraft types, with 777s and 767-300s also in the pipeline. "To a certain extent, it would be better if these were on a European AOC," Gadhia said. "The pool of crew is very limited."

The next challenge will be funding this expansion. Astral is profitable, with a strong balance sheet, a sizeable fleet and a good track record, but the cost of borrowing in Africa is high and banks are not very comfortable with aviation debt because of the high levels of default. This means Gadhia is seeking strategic investors. Discussions are at an early stage with "at least" three interested parties.

"Remember, we are not selling Astral. I'm just selling a minority equity to fund the future growth. Every airline has to do that at some stage in their life," Gadhia concluded.

AIR CÔTE D'IVOIRE PASSE AU LONG-COURRIER

Air Côte d'Ivoire a signé sa première commande pour deux A330neo en octobre dernier à Toulouse. La compagnie pourra ainsi étendre sa connectivité et poursuivre son développement. Par

Anuradha Deenapanray Chappard.



All smiles: The agreement was announced at Airbus headquarters in Toulouse in the presence of Amadou Koné, Laurent Loukou, General Abdoulaye Coulibaly, and Philippe Mhun, Airbus executive vice president programmes and services.

La cérémonie a eu lieu en présence d'Amadou Koné, ministre des Transports de Côte-d'Ivoire, de Laurent Loukou, Directeur Général d'Air Côte d'Ivoire et du Général Abdoulaye Coulibaly, le Président du Conseil d'Administration de la compagnie nationale.

Air Côte d'Ivoire exploite aujourd'hui une flotte de six avions Airbus dont un A320neo, deux A320ceo et trois A319. Le choix de l'A330neo d'Airbus permettra de réaliser des synergies dues à la communalité des systèmes opérationnels.

Cette acquisition permettra aux pilotes actuels des A319 et des A320 de bénéficier d'une

extension de qualification pour prendre les commandes de l'A330, qui offre la même ergonomie de cockpit.

Ce passage au long-courrier d'Air Côte d'Ivoire a été reportée de deux années en raison de la crise du Covid-19. Les A330neo permettront à la compagnie d'étendre son réseau et de se lancer sur les destinations transcontinentales.

La compagnie nationale ivoirienne confirme ainsi sa stratégie d'expansion en droit fil avec son nouveau « business plan » 2021-26, validé par le chef de l'État Alassane Ouattara en 2021. Ce plan prévoyait notamment un déploiement de

JMMARY

AIR CÔTE D'IVOIRE SWITCHES EMPHASIS TO LONG-HAUL

Air Côte d'Ivoire will be able to extend its network to transcontinental destinations after signing an order for two A330neos.

The ceremony took place in the presence of Amadou Koné, the country's minister of transport, Laurent Loukou, MD of Air Côte d'Ivoire, and General Abdoulaye Coulibaly, the airline's chairman.

Air Côte d'Ivoire currently operates a fleet of six Airbus aircraft, including one A320neo, two A320ceos and three A319s.

This acquisition will allow current A319 and A320 pilots to benefit from a qualification extension to take control of the A330, which offers the same cockpit ergonomics.

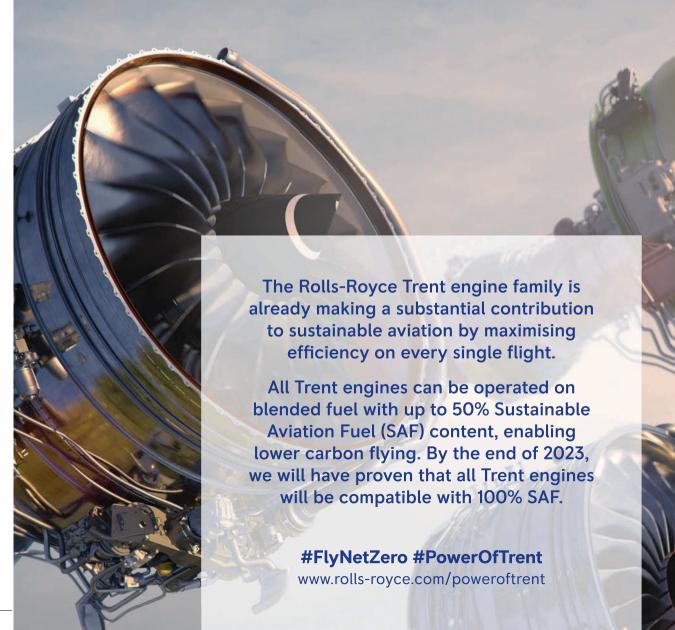
This transition to long-haul had been postponed for two years due to the pandemic but the A330neos will allow the company to extend its network to transcontinental destinations.

la flotte d'Air Côte d'Ivoire sur le long-courrier à partir de 2023.

Des leviers de croissance se trouvent également sur le marché régional. La compagnie continue ainsi à développer ses capacités en matière de formation et de la MRO.



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Speaking out: Allen Onyema making his point during the AFRAA Leadership Dialogue. PICTURE: WARK PILLING.

PEACE TALKS

Allen Onyema, the charismatic founder and chief executive of Air Peace, is full of passion describing the many hurdles he has faced establishing his young airline. **Mark Pilling** reports.

n a tirade during his appearance as the lead speaker in the February 2023 edition of the African Airlines Association (AFRAA) SkyConnect Leadership Dialogue, Allen Onyema rattled through topics such as market access, over-capacity, being blocked from serving countries, and high costs that make the everyday life of doing business for a Nigerian airline so tough.

Onyema worked as a lawyer for 16 years in Nigeria before moving into the business world to make his fortune, later becoming interested in forming an airline in 2013.

However, he has no regrets and is determined to keep Air Peace on track, learning as he goes along.

"When, in 2013, I bought my first aircraft I didn't know anything about aviation. I went into aviation out of love for one's country and out of love to create jobs for the people," he explained.

As moderator Raphael Kuuchi, AFRAA's director government, legal and industry affairs, observed, it is "no mean achievement" for Air Peace to survive for nine years, especially in the "rough terrain of Nigeria, where we've known a number of airlines to come up and, within five years, they've disappeared from the scene".

Air Peace has grown steadily since it began operating in 2014 with a single Boeing 737-300. It now has an in-service fleet of 17 aircraft with five Airbus A320s, five 737NGs, five Embraer E195 E2s and two 777s, according to data from Cirium. It has a further nine aircraft in storage.

The airline's main bases in Nigeria are Abuja and Lagos, from where it connects the most popular domestic cities, while its international destinations include Johannesburg in South Africa, Freetown in Sierra Leone, and Dakar in Senegal.

Onyema wants Air Peace to expand within Africa and, to

help do this, it has firm orders for 13 E195s, with a further five to be delivered this year, he said.

In addition, the carrier has firm orders for seven 737 MAX 8s and eight 737 MAX 9s, although Onyema did not say when deliveries of the aircraft will begin.

The carrier has its eye on more wide-bodies, with aspirations to launch long-haul routes from its Lagos hub. "We are also discussing with Boeing for the Dreamliner, which I feel will come very soon," he noted.

Asked if he was worried about the arrival of new entrants to the domestic market, Onyema believes the experience of Air Peace is a major advantage. "There are two or three airlines seeking to launch services, including Nigeria Air. We are not scared. The more the merrier," he said.

Onyema called for government action if access to international markets is blocked. "The Nigerian Government has been reaching out to those governments that will not allow Nigerian carriers, but I think we have to do more by saying if our airline is not going [to be allowed to fly], then yours must stop," he said.

"And when you are talking about foreign countries it is not just the west," said Onyema. "There are some airlines in the African continent that try to be very bullish and not play fair."

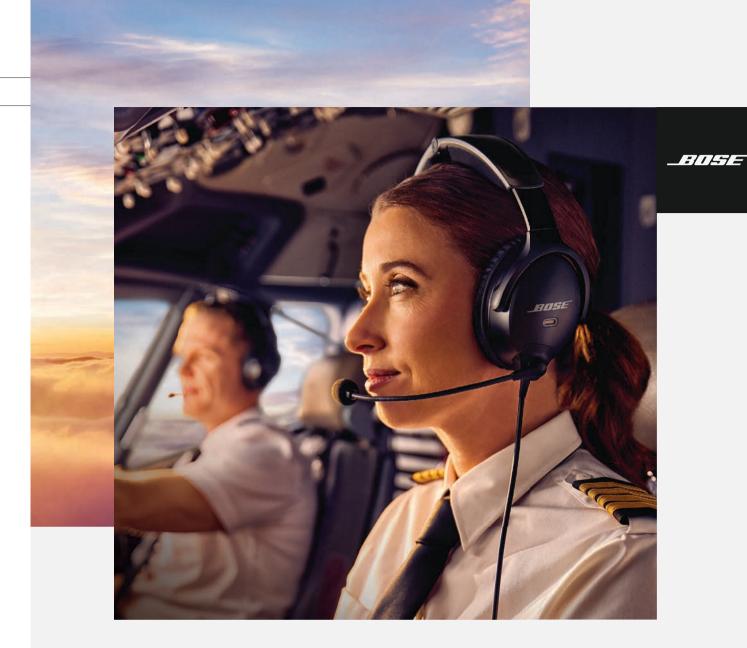
Speaking about the African Union's single African air transport market (SAATM), Onyema said: "The set-up is a noble idea. If sincerely implemented, it is going to help the cause of aviation on the African continent and it is going to help boost the economies of the African nations.

"However, the way it is being implemented now is very lon-sided."

He cited examples of his airline being blocked from serving some African nations by players using a variety of tactics.

The headwinds to operate an airline successfully in Nigeria are clearly strong. However, Onyema is adamant that the continent's carriers can pull through if they take care of their own destinies.

"Africa must wake up. Africa is the next destination," he said. "Nobody should tell us that we are still in the dark ages. No; there is a new scramble for Africa going on now," he concluded.



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Having recently emerged from the shadow of financial administration and an alliance with Etihad, how is Air Seychelles preparing for the future?

Alan Dron has been finding out.

The road to recovery from 'Chelles shock...

t has been a tough few years for Air Seychelles. Even before Covid-19, the airline announced it was downsizing and ditching its long-haul aircraft, an admission that competition from much larger foreign carriers was too strong.

That was followed by the evaporation of passenger traffic during the pandemic. On top of that, the airline found itself fighting a winding-up position from creditors of Etihad Airways, which formerly owned a 40% stake in Air Seychelles.

During Etihad's stewardship, Air Seychelles incurred significant debt. This consisted of funds that were owed directly to Etihad, together with loans of almost \$72 million that were funded by the capital markets and later controlled by bondholders. As a result, Air Seychelles entered company reorganisation in October 2021 and appointed administrators to create a rescue plan.

The situation was resolved last May after the Seychelles Government bought out Etihad's shares and negotiated a substantial discount in the debt owed.

So, with Air Seychelles' finances now back on an even keel, what are its prospects?

The company's core network involves regional destinations in and around the Indian Ocean, namely Mauritius, Johannesburg and Mumbai. Slightly further afield are Tel Aviv in Israel and, perhaps surprisingly, Almaty in Kazakhstan, which has provided new tourist flows to the Seychelles: "It's something we developed last year and is doing very well," said acting CEO, Captain Sandy Benoiton.

Although the company no longer competes on long-haul services, it benefits from its former rivals by having a ground-handling business that services all international carriers arriving in Mahé. A cargo-handling operation brings in another revenue stream. "Obviously, as tourism comes in, we handle more business," said Benoiton.

However, forthcoming developments may alter that. The country is applying a cap on the number of incoming tourists, partly for environmental reasons. That means that inbound tourism flows will level off, rather than continue to expand indefinitely.

The slimming down of Air Seychelles' fleet saw it dispense with its long-haul Airbus A330s and its A320ceos. Today, the



sectors in the Seychelles archipelago are served by De Havilland Canada Twin Otter Series 400s.

PICTURE: DE HAVILLAND AIRCRAFT OF

fleet consists of a pair of A320neos for regional services, plus five DHC-6-400 Twin Otters for domestic services around the archipelago.

"We feel the current fleet is OK," Benoiton said. In the relatively near future however, developments are afoot.

"We're not going to go into Airbus A330s or Boeing 787s like we used to. The A321XLR will probably be our next step," Benoiton added.

Using the longest-ranged version of the A320 family will allow the airline "to get into routes that we can't get into right now" while maintaining the benefits of commonality for pilots and maintenance personnel. The A321XLR could reopen the possibility of flying to Chinese and European destinations.

The likely requirement is for one or two A321XLRs, as: "We have to be mindful of the size of the population. We have to be mindful of our mandate. We can't compete with the big carriers and because the Seychelles is so small, we can't fill the aircraft all year round."

The current A320neos offer benefits beyond the 20% improvement in fuel-burn compared to their predecessors. The airline's former A320ceos had a 168-seat layout, but Air Seychelles could effectively sell only 132 seats because the long distances to diversion airports in the Indian Ocean meant that it had to sacrifice passenger payload to increase range.

"We don't have that issue any more. We carry 168 now. We couldn't make Tel Aviv non-stop with the A320ceo, but we can with the neo," explained Benoiton.

To offset its absence of long-haul aircraft at present, Air Seychelles last year signed a codeshare agreement with Turkish Airlines and would like to follow suit with some of the UAE carriers with which it currently has interline arrangements. In fact, one such codeshare has been agreed in principle, but some technicalities have still to be finalised before an announcement is made.

Having connections through Istanbul and one of the major Gulf hubs will considerably improve links for Seychellois looking to travel further afield.

AFRIQIYAH AIRWAYS ENVISAGE SA RENAISSANCE

Présent lors de la 54ème assemblée générale de l'AFRAA à Dakar, Almois Mostafa Ben Esmaiel, Cooperation and International relations (Bureau director) d'Afriqiyah Airways a confié à que la compagnie nationale libyenne poursuit résolument la voie de la reprise. Anuradha Deenapanray Chappard reports.

La guerre civile puis le Covid-19 ont beaucoup affecté le transport aérien dans le pays. Afriqiyah Airways a perdu de nombreux avions mais pas sa clientèle fidèle.

« Nous avons perdu beaucoup d'avions, nous travaillons pour rebâtir notre compagnie et la remettre sur le marché », affirme Almois Mostafa Ben Esmaiel. « Nous avons ainsi constitué un comité pour étudier la remettre d'aplomb et remettre en service nos avions. »

Afriqiyah Airways fut florissante avant la crise institutionnelle et du Covid-19. Elle a été mise en place pour maintenir la connexion entre le Nord et le Sud du pays.

Tripoli était un grand hub avec un positionnement idéal entre l'Afrique et l'Europe. Elle disposait de plus de 30 destinations dont Tunis, Le Caire,



Almois Mostafa Ben Esmaiel: «
Nous sommes optimistes pour
l'année 2023.»
PICURE: PVA SERVICES

Istanbul, Alexandrie, ou encore Dieddah.

« Nous sommes optimistes pour l'année 2023 avec la stabilisation politique de notre pays concernant notamment les relations entre le gouvernement exécutif et le parlement législatif. »

La Libye dispose d'une base économique de même qu'une richesse culturelle et touristique avec les plus beaux vestiges romains et grecs autour de la capitale.

La stabilité des institutions gouvernementales et l'étroite collaboration entre l'aviation et la structure civile pourront faciliter la reconstruction du hub de Tripoli et assurer un retour en force d'Afriqiyah Airways.

Il s'agit également de l'aspiration de toute une population.

SUMMARY

AFRIQIYAH PLANS ITS RENAISSANCE

Libya's national airline, Afriqiyah
Airways, is battling back from adversity.

Speaking at the 54th African Airlines Association (AFRAA) general assembly in Dakar, Almois Mostafa Ben Esmaiel, the carrier's cooperation and international relations director, explained how the recovery is being handled.

Civil war in the country – and then the Covid-19 pandemic – greatly affected air transport and the airline lost many aircraft but, he explained, not its loyal customers.

"We're working to rebuild our company and put it back on the map," he said. "We have set up a committee to study how to put it back on track and get our remaining aircraft back into service."

Afriqiyah Airways was flourishing before the crises when its main hub in Tripoli, which enjoys an ideal position between Africa and Europe, had more than 30 destinations including Tunis, Cairo, Istanbul. Alexandria, and Jeddah.







Trouble in store for Ghana's new flagship?

Up in the air: The only image of the planned new airline was issued by Boeing when it received a tentative order for three 787s. However, it appears that there are now plans to switch to Airbus equipment. PICTURE: BOEING.

or some years now, Ghana has hosted ambitions to be an aviation hub for west Africa. Part of that ambition involved the creation of a new flag-carrier.

Plans for the creation of a new national airline in Ghana have taken a step forward with the Ghanaian Government awarding start-up, Ashanti Airlines, and financial backers, Zotus Group, a tender to begin operations later this year.

The airline, to be known as Ghana Airlines, is planned to start operations with domestic and regional routes, with long-haul services to destinations including London Heathrow and New York to follow.

The country has been without a national airline since the collapse of Ghana International Airlines in 2010. Plans for a new flag-carrier have been bounced around for several years, with Ethiopian Airlines and EgyptAir mooted as potential strategic partners for the new airline.

Ethiopian, Africa's most consistently successful national airline, was touted as the most likely partner and the Egyptian Government was in talks with its Ghanaian counterpart from around the time of the 2019 Dubai Airshow.

However, both have apparently fallen by the wayside and the announcement of the successful bidders came as something of a surprise.

"The time has come to return Ghana to the aviation map," said Ghanaian Transport Minister, Kwaku Ofori Asiamah, when announcing the contract award to Ashanti and Zotus. "Learning from past experiences and following best practices within the aviation industry, it is best to collaborate with the private sector."

Ashanti Airlines is a subsidiary of the country's Despite Group conglomerate and, at the time of writing, had yet to be awarded its airline operator's certificate (AOC) by the country's aviation regulator.

UK-based Zotus Group describes itself as "an organisation dedicated to the development of humanitarian projects and transforming Africa and third world countries", with a portfolio spanning areas such as hydrocarbons, manufacturing and agriculture.

It was co-founded by former England international soccer player, Emile Heskey, and business development specialist, Davison Simango.

Attempts to contact Ashanti Airlines through the Despite Group were unsuccessful.

The Ghanaian Government has named the successful bidders to create a new national airline, but doubts remain in some quarters over the plans. **Alan Dron**

reports.

However, Zotus' Simango, speaking in early February, said: "We've been working with Ashanti throughout the whole tender process. In a month or two the GCAA will issue the AOC."

He declined to give details of the funding, beyond describing it as "a significant amount". Asked if there were still plans to bring in an experienced external strategic partner, he replied: "If there's a deal on the table, yes, but at the moment we're solid with the partnership we have with Ashanti."

At the 2019 Dubai Airshow, the Ghanaian Government struck tentative deals with Boeing and De Havilland Canada for three 787-9s and "up to six" Dash 8-400 turboprops. However, the deals are not believed to have been finalised. Boeing declined to comment on the status of the order.

According to Simango: "We're not part of whatever deal was made previously. We're looking at completely different aircraft - Airbus A320s and A330s.

One Ghanaian airline executive, speaking on conditions of anonymity, expressed reservations over the deal. He said Ashanti had been trying to get its AOC for six years and that his understanding was that the government had made possession of an AOC a prerequisite of being awarded the contract to set up the new national airline.

"My understanding from Ghana CAA is that... they were given instructions by government to help Ashanti produce the [operating] manuals. The CAA was not willing to compromise its standards. The government then said, 'Right, if you won't compromise, sit with them and help them with it'."

He added that Ethiopian had dropped out of the picture because the then CEO, Tewolde GebreMariam, had had previous experience of losing a deal to be a strategic partner with the country's previous flag-carrier, Ghana International Airways.

Wary of similar disappointment, he asked for cast-iron guarantees that Ethiopian would have full control of the new airline. The Ghanaian Government balked at his demand and the deal fell through.

Additionally, plans to have EgyptAir as the strategic partner fizzled out after the Egyptian official driving the deal died of a heart attack and the Ghanaian aviation minister behind the deal decided not to stand for re-election, "so everyone connected with the project faded away".



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UNE NOUVELLE DYNAMIQUE

Air Sénégal a accueilli la 54ème assemblée générale de l'AFRAA à Dakar en décembre dernier. Un tour d'horizon de l'actualité, des projets et de la stratégie de la compagnie avec son nouveau directeur général, Alioune Badara Fall. Un reportage d'Anuradha Deenapanray Chappard.

lioune Badara Fall a pris les commandes d'Air Sénégal en juillet 2022 et s'est attelé dès son arrivée à remettre à flot la compagnie nationale. Il a revu avec efficacité et pragmatisme les fondamentaux de la compagnie nationale sénégalaise.

Il s'est appliqué à améliorer la qualité des services notamment à bord, consolider la formation des PNC ou encore à réaménager les cabines.

« Après une étude de rentabilité économique, Air Sénégal a installé des logiciels de « Revenue Managament » de haute technologie. Ils permettent à la compagnie d'obtenir un meilleur « Yield Management », affirme Alioune Badara Fall. « La compagnie a pu également mettre en place une grille tarifaire adéquate pour équilibrer et rentabiliser les lignes de notre réseau. Nous avons également amélioré notre niveau de ponctualité à un niveau jamais atteint », ajoute-t-il.

Les résultats sont aujourd'hui au rendez-vous pour Air Sénégal avec un taux de remplissage et un chiffre d'affaires inégalés. « Cette réussite est avant tout le fruit du travail réalisé par l'ensemble des salariés d'Air Sénégal et le soutien sans faille de l'état sénégalais », souligne le DG.

Autres actualités pour Air Sénégal, la construction d'un centre de MRO à l'Aéroport International Blaise Diagne (AIDB) pour minimiser notamment les coûts de maintenance d'Air Sénégal à l'étranger. L'objectif est d'accueillir dans un premier temps la flotte d'Airbus et d'avoir une maintenance de proximité en Afrique de l'Ouest.

Par ailleurs, une stratégie d'alliance ou de partenariat est cours d'élaboration notamment pour les routes vers les États-Unis, le Moyen-Orient et l'Afrique du Sud.

Enfin, la compagnie a un engagement solide en matière de formation au sein de l'AIMAC (Académie Internationale des Métiers de l'Aviation Civile). Celle-ci est menée en collaboration avec l'Armée de l'air sénégalaise et l'aéroport



POUR AIR SÉNÉGAL



Host Alioune Badara Fall with Abderrahmane Berthé, AFRAA secretary general, and Jenifer Bamuturaki, CEO of Uganda Airlines and new AFFRA president.
PICTURE: AFRAA.

international AIBD. La première promotion d'élèves pilotes et techniciens en maintenance aéronautique est en formation depuis près d'un an. L'académie a récemment pris livraison de nouveaux avions d'entraînement. Ces étudiants diplômés permettront de répondre aux besoins d'Air Sénégal en pilotes, ingénieurs et techniciens de maintenance.

Air Sénégal est encore une jeune compagnie certes mais avec de grandes ambitions dans la région. Sa flotte comprend trois A330neo, deux A321, deux A320, trois A319, un A220 et 4 ATR72.

Elle opère deux lignes intercontinentales vers Paris et les États-Unis en partenariat avec AIRHUB. Depuis janvier 2023, la compagnie a arrêté sa desserte sur Baltimore pour se focaliser uniquement sur New York, avec deux fréquences hebdomadaires. Elle dispose d'un réseau solide sur l'Europe avec des routes vers Barcelone, Marseille, Lyon et Milan.

Air Sénégal a toutefois été contrariée par des problèmes notamment de motorisation de son A220. Elle avait signé un protocole d'accord pour huit A220 lors du salon de Dubaï en 2019. En attendant une solution pour décanter la situation, la compagnie nationale sénégalaise se penche sur sa stratégie de développement au niveau régional.

La nouvelle direction d'Air Sénégal demeure confiante pour 2023. Côté trafic aérien, au moment où le magazine allait sous presse, Air Sénégal avait retrouvé son niveau de 2019, d'avant la crise du Covid-19.

Dakar dispose d'une position stratégique dans la région et Air Sénégal garde le cap avec le soutien de l'état sénégalais. L'objectif reste inchangé: connecter l'Afrique de l'Ouest au reste du monde.

TRANSAIR MAINTIENT LE CAP DE LA CROISSANCE

Créée en 2009 par le commandant Alioune Fall, Transair a véritablement pris son envol en 2016. Elle est devenue la principale compagnie privée du Sénégal.

Naby Silla, directeur régional de Transair, se félicite du chemin parcouru et de la trajectoire actuelle de la compagnie. Disposant d'un seul avion à son lancement, Transair compte aujourd'hui d'une flotte de quatre avions : un Embraer ERJ120, deux ERJ145 et d'un Boeing 737-500 acquis en 2019.

« Nous attendons un second Boeing 737-500 pour le premier semestre 2023 » souligne Naby Silla. La compagnie envisage de mettre à niveau sa flotte Embraer en en évaluant l'ERJ170, 175 ou 190. ».

Avant la crise du Covid-19, Transair transportait près de 90 000 passagers par an. Avec l'entrée également sur le marché d'Air Sénégal à partir de 2018, cette performance s'est aussi érodée. Cette situation n'entame en rien le plan de croissance du transporteur

Transair a démarré ses vols vers l'Afrique Centrale en juillet 2022 depuis Dakar. Elle dessert actuellement 4 villes africaines (Abidjan, Bamako, Brazzaville et Libreville). « Nous envisageons avec le second 737-500 de voler vers Accra, Cotonou et Lagos et de reprendre les routes vers Banjul et Freetown ».

Naby Silla montre un intérêt pour un partenariat et une harmonisation avec la compagnie nationale sénégalaise. Il s'agit d'assurer une croissance ontimale

Transair met l'accent pour l'année 2023 sur la consolidation, la coopération et de la conformité règlementaire. Elle prévoit à cet effet de relancer son processus pour obtenir la certification IOSA.

ROMUALD TOUEMBOU NGUEYAP

SUMMARY

AIR SENEGAL OUTLINES DYNAMIC FUTURE

Air Senegal's new general manager, Alioune Badara Fall, used the opportunity of hosting the 54th African Airlines Association (AFRAA) general assembly in Dakar to outline the company's plans.

Fall took control of Air Senegal in July 2022 and immediately set out to refloat the national company, while reviewing its structure and operating efficiency.

He has applied himself to improving the quality of services, particularly on board, while consolidating the training of cabin crews and refitting the cabins.

"After an economic profitability study, we installed hightech revenue management software that allowed us to gain superior yield management," said Fall. "The company was also able to put in place an adequate tariff schedule to balance and make profitable the routes of our network. We have also improved punctuality to an unprecedented level.

"Above all, this success is due to the hard work carried out by our employees – along with the unfailing support of the Senegalese state," he added.

Air Senegal has also built an MRO centre at Blaise Diagne International Airport (AIDB) that's designed to minimise the airline's overseas maintenance costs. The objective, initially, is to accommodate the Airbus fleet and to provide local maintenance in west Africa. In addition, an alliance – or partnership – strategy is being developed, mainly for routes to the US, the Middle East and South Africa.

The company also has a firm commitment to training within the International Academy of Civil Aviation Professions (AIMAC) and this is carried out in collaboration with the Senegalese Air Force and AIBD.

The first cadre of student pilots and aeronautical maintenance technicians has been in training for almost a year and the academy recently took delivery of new training aircraft. The graduate students will help to meet Air Senegal's needs for pilots, engineers and maintenance technicians.

Air Senegal's fleet includes three A330neos, two A321s, two A320s, three A319s, one A220 and four ATR72s.

The airline has recently been wrong-footed by issues with the engines on its delayed order of eight A220s, and this has postponed its regional development strategy.

Air Senegal operates two intercontinental routes – to Paris and the United States – in partnership with AIRHUB. Since January this year, the company has ended its Baltimore service to focus solely on New York, with two weekly services. It also has a solid network to Europe with routes to Barcelona, Marseille, Lyon and Milan.

SUMMARY

TRANSAIR MAINTAINS COURSE FOR GROWTH

Senegalese regional airline, Transair, is on an upward trajectory, according to its regional director. Naby Silla.

Created in 2009 by Commander Alioune Fall, Transair began operations in 2016 with just one aircraft.

Transair now has a fleet of four aircraft – an Embraer ERJ120; two ERJ145s; and a Boeing 737-500.

"We are expecting a second Boeing 737-500 during the first half of 2023," said Silla. "The company also plans to upgrade its Embraer fleet following evaluation of the ERJ170, 175 or 190."

Before the pandemic, Transair transported around 90,000 passengers per annum but, with Air Senegal also entering this market from 2018, those numbers have been slimmed back.

Transair began flying from Dakar to central Africa in July 2022 and it currently serves four African cities – Abidjan, Bamako, Brazzaville and

"With the second 737-500, we plan to fly to Accra, Cotonou and Lagos, while resuming our routes to Baniul and Freetown." concluded Silla.

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Ethiopian ambitions key to Zambia's step up in class

Having flown through its first vear of operations,

Keith Mwanalushi

provides some thoughts on the start-up carrier, Zambia Airways, and its potential path towards the next phase of development.

▼ The airline's most powerful asset will be unlocking the untapped potential in Zambia itself.

he airline, which is a joint venture between Ethiopian Airlines (ET) and the Zambian Government through ■ the Industrial Development Corporation (IDC). launched operations on December 1 2021 with a single Dash-8 Q-400 on damp lease from Ethiopian.

Since then, it has begun domestic services from Lusaka to Ndola in the Copperbelt, Livingstone, and, most recently, Solwezi, the provincial capital of Zambia's mineral-rich North-Western Province.

In fact, the launch of Solwezi brought attention to potentially changing passenger behaviours and the affordability to fly domestically – an issue that has continually hindered the local aviation industry due to high air fares beyond the reach of the general public.

Zambia's Minister of Transport and Logistics, Frank Tayali, attributed the launch of the Solwezi route as creating a new class of flyers in the country. He told the local media that this market had previously been unserved, and added that the introduction of the service by Zambia Airways has given more flight options and affordability to the public.

According to data from the World Bank, the Zambian economy rebounded in 2021, with GDP growing at 4.6%, from a contraction of 2.8% during the pandemic in 2020.

At the time of writing, Zambia Airways was in advanced stages of launching the first regional services to Johannesburg in South Africa, operated by an as-yet-to-be-delivered Boeing

The route had been previously scheduled for July 2022 but was set back due to difficulties in obtaining a foreign operator permit. Local reports indicate Zambia Airways also obtained the necessary permission to launch services to Harare in Zimbabwe, but full details remain sketchy at present.

The airline plans to operate 12 aircraft and carry 1.9 million passengers by 2028.

In order for the airline to fulfil its ambitions, it will need good cashflow availability, especially in the first two years of operation, to survive market challenges and competition.

It will also take time to build the reputation and the credit lines by the service providers. Certainly, the influence from

equity partner, Ethiopian, will help along the way, but the airline's most powerful asset will be unlocking the untapped potential in Zambia itself.

The original Zambia Airways (QZ), which it replaces, built up a number of destinations over 30 years, including a solid regional network connecting all the key southern African capitals through its hub in Lusaka.

This catchment area had a huge strategic advantage, considering Lusaka is within a two-hour flight distance to the capitals of all the surrounding countries.

This would create an opportunity to syphon traffic from within the region through Lusaka, creating an aviation hub to destinations in Africa and beyond, as did QZ.

For the new Zambia Airways, creating a central hub in southern Africa will also be beneficial but, perhaps, for slightly different reasons – and this lies with its partner,

For the last several years, ET has been expanding its reach in Africa through regional hubs and strategic investments in other airlines that have government or golden share stakes. This allows it to far more easily tap into the bilateral agreements of those countries and access to fifth freedom rights, which allow an airline to carry revenue traffic between foreign countries as a part of services connecting the airline's own country.

ET now has regional subsidiaries in Zambia, Malawi, and Togo. There is speculation that talks are in progress with the Namibian Government to revive Air Namibia as well.

It's unlikely that any of these operators will fly outside of their respective regions, but will potentially focus of delivering feeder traffic to the mother hub in Addis Ababa.

Zambia's Civil Aviation Authority (ZCAA) has previously indicated awareness of Zambia Airways' plans to fly further afield and potentially also compete with ET, and if these plans actually come to fruition, then perhaps the fledging new Zambia Airways, over time, might just stand a chance to fly the flag like its legendary predecessor.

AÉROPORTS





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Sudan Airports Company is working on a five-year strategic plan to maintain, develop and extend the country's airports, with passenger experience, innovation, and sustainability as top priorities.

Anuradha Deenapanray Chappard spoke to SAC general manager Elkhatim Bbabiker Eltayeb Mohamed.

Hub at the centre of Sudan's masterplan

ncreasing airport capacities must keep pace with growing passenger and cargo demand. That's the view of SAC general manager Elkhatim Bbabiker Eltayeb Mohamed.

"The aim is to meet international standards and enhance operational efficiency as well as passenger experience through new technologies and digital operations," he explained.

"Our team of engineers has found the best solutions to ensure excellent processing, sustainability, and optimal support to passengers with the best functionality, while enhancing safety and security."

A new masterplan has, thus, been prepared and project components identified for Khartoum International Airport (KRT), with a new state-of-the-art under-one-roof passenger terminal, concrete apron, runway extension, parallel taxiway and other ancillary facilities.

"International consultancy firms will be contracted to design and supervise construction works. We are in the last stage of selection and works are planned to be ready for operation by 2024," added Mohamed.

In parallel, SAC is embarked on rehabilitation projects at Kassalla, Obeid, Damazin, Kadogli and the new Zalingi

Airport to cater for cargo flights and meet growing demand in industrial treated agriculture and animal products. These regional airports will serve mixed traffic – passenger and

The company, which manages and operates 13 airports, including six international, is also

addressing the connectivity issue through a coherent route development plan with other key players.

Sudan National Airlines is working on procuring new aircraft and a new national airline will start its operation for domestic and international flights by 2024.

New routes are also being studied and discussed regarding cargo flights.

"The strategic plan for Sudan Airports Company imagined the new Khartoum Airport as a passenger and cargo hub for Africa. The new airport masterplan comprises the required facilities for a hub airport, including a free zone area, an industrial area, stores and an airfield system with two parallel 4,000 metre runways," said Mohamed.

During the pandemic, the total passenger traffic in Sudan declined rapidly and reached 58.3% of the volume before 2019.



Elkhatim Bbabiker Eltayeb Mohamed: "International consultancy firms will be contracted to design and supervise construction works."

Sudan airports are gradually bouncing back. Domestic traffic passengers started increasing at a slow rate as the pandemic affected the labour market.

International traffic was severely hit by the restrictions and passenger processing procedures due to pandemic protocols, especially the Middle East, which represents 86% of passenger traffic. But traffic volume has come back to the 2019 level and is expected to recover totally this year.

"We are facing complicated financing problems due to the instability of the political situation and guarantees. Despite this, we started maintaining and improving our infrastructures from our limited local resources and working on engaging the private sector for Sudan Airports by using private-public partnerships," explained Mohamed.

Furthermore, the company has embraced sustainability through mitigation measures to save energy – LED lighting, solar energy, optimising air conditioning.

SAC has also joined the Airports Council International (ACI) airport accreditation programme. Global environmental consulting company, Envisa, will conduct a study to carve out a roadmap for smarter and greener



SOMMAIRE

DEVENIR UN SMART AIRPORT ET UN HUB

Sudan Airports Company (SAC) travaille sur un plan stratégique de cinq ans pour maintenir, développer et agrandir les aéroports soudanais, avec comme point d'orque l'amélioration de l'expérience passager, l'innovation et la durabilité.

Selon le directeur général de la SAC, Sir Elkhatim Bbabiker Eltayeb Mohamed, ces travaux sont nécessaires pour répondre à la croissance du trafic passager et du fret.

Le plan stratégique vise en effet à transformer l'aéroport international de Khartoum en un important hub en Afrique, Les travaux seraient achevés d'ici 2024.

En parallèle, les aéroports régionaux de

Kassalla, Obeid, Damazin, Kadogli et de Zalingi vont être réhabilités pour assurer les vols de fret notamment dans la filière agro- alimentaire.

SAC qui gère et exploite 13 aéroports dont 6 internationaux se penche également sur un plan pour developper de nouvelles routes.

Sudan National Airlines projette l'acquisition de nouveaux avions alors qu'une nouvelle compagnie aérienne nationale commencera ses opérations pour les vols locaux et internationaux d'ici 2024.

Par ailleurs, les aéroports soudanais rebondissent progressivement. Le trafic devrait reprendre totalement en 2023.

T: +249123404136 E: info@safataviationgroup.com www.safataviationgroup.com 25 **AÉROPORTS**



Moroccan airports aim to double their capacity by 2040 and the National Office of Moroccan Airports (ONDA) has many other innovations in the pipeline, as

Anuradha Deenapanray Chappard found out from the organisation's CEO, Habiba Laklalech.

NDA manages 25 airports in Morocco, including 19 which are international, and has a multi-faceted strategic plan that aims to transform these gateways into "state-of-the-art human spaces".

According to Habiba Laklalech, who took up the reigns during a period of considerable uncertainty because of the Covid-19 pandemic, ONDA has the required resilience to forge a profitable and sustainable airport economy.

"We intend to make the kingdom's airports real places of life which, in the eyes of their users, will embody the identity of the territory where they are located and allow their economic and tourism attractions to radiate beyond their borders."

Over the past few years, ONDA has embarked on an ambitious infrastructure development programme, which has led to the upgrading and modernisation of its airports. They have tripled their capacity in less than 15 years.

"We must project ourselves into the future by learning from the past to respond to economic, social and climatic emergencies," said Laklalech.

"From control towers to runways, terminals to concourses and landside shuttle systems, we need to provide solutions tailored to the present and future needs and expectations of our customers.

"Climate risks threaten the entire global economy. The need to anticipate and transform is becoming a survival issue for aviation in the low-carbon world of tomorrow."

Laklalech said it was vital to achieve energy transition and digital transformation, especially in the face of cybersecurity issues. "We are going to introduce the environmental component into all our infrastructure projects," she added.



project ourselves into the future by learning from the past to respond to economic, social and climatic emergencies.

HABIBA
LAKLALECH

PICTURE: ON

ONDA has just launched a study to improve energy efficiency in its airports and introduce renewable energies (including photovoltaic), like at Marrakech-Menara. Modernisation work, particularly in Marrakesh-Menara, Agadir and Tangier, will be undertaken this year to reduce their carbon footprint.

The initiative is part of ONDA's integrated ecoresponsible approach, which brings together all airport stakeholders and partners. It has fully embarked on the Airports Council International (ACI) airport carbon accreditation (ACA) programme. Casablanca and Marrakech airports are at level 2 (reduction), while others have started the accreditation procedure.

"We are in the process of increasing our level of accreditation year-on-year to reach net zero by 2050," said Laklalech. "This programme allows us to structure and align our approach at all our airports."

According to Laklalech, decarbonisation will be a top priority in the years to come. "We need to implement innovative action aimed at achieving energy efficiency through the use of renewable energy, the development of a medium-term plan to prepare our airports for sustainable alternative fuels (SAFs), and the introduction of decarbonisation requirements in our procurement policy," she said.

The ONDA CEO is convinced that the investment costs will be justified in view of the expected benefits in the long term. "Access to external financing for infrastructure projects requires compliance with international standards for sustainable development and promotes green projects," she explained.

Laklalech believes that liberalisation can be a lever of growth. The ambitious policy, initiated in 2004, led to an open skies agreement with the European Union at the end of 2006, and more liberal bilateral agreements with Arab and Asian countries, and on the American continent.

She said the Moroccan experience could be used as a model in Africa, where many countries are still hesitating about implementing open skies.

PRIME MINISTER LAUNCHES ABIDJAN AIRPORT THIRD PHASE

The third phase of the extension of Félix Houphouët-Boigny International Airport in Abidjan has been launched by Ivory Coast Prime Minister, Patrick Achi. **Anuradha Deenapanray Chappard** reports.

The Ivorian authorities are determined to transform Abidjan International Airport (AERIA) into one of the most efficient hubs in west Africa and the extension project aims to increase the facility's capacity from two to five million passengers per year by 2026.

The first two phases of the airport expansion project started in 2017.

The number of aircraft parking areas have been increased, the taxiways for long-haul aircraft broadened, and an additional taxiway has been set up, as well as the creation of a new business aviation terminal.

Jetex is the exclusive fixed-based operator (FBO) at the airport, having signed a memorandum of understanding (MoU) with AERIA during the European Business Aviation Convention & Exhibition (EBACE) in 2018.

Jetex Abidjan is located a 15-minute drive away from the business centre (Plateaux) and the beach. It includes a comfortable lounge, private spaces, and a conference room. It welcomes



Growing up: Abidjan International Airport wants to increase capacity from two to five million passengers annually by 2026.

both first-class and business aviation passengers.
The third phase of the airport development

will focus on the extension of the terminal from 30,000 to 55,000sqm and an increase in the number of luggage belts, boarding offices, and vehicle parking spaces.

Abidjan International Airport had logged a continuous growth of traffic before the Covid-19 crisis, with nearly 2.3 million passengers in 2019.

Achi said: "Modernising and extending our airport will strengthen our west African hub in the markets made up of hundreds of millions of French-speaking people within the ECOWAS (Commissions of the Economic Community of West African States) and the UEMOA (West Africa Economic and Monetary Union) areas. This will allow the air transport sector to bolster Ivorian economic growth."



DEFENCE

AÉROPORTS DÉFENSE

Harriet Nakazwe Angetile, the first female elected vice president of the safety and technical committee at Airports Council International (ACI) Africa, speaks to

Keith Mwanalushi about building safety standards for certification of the continent's airports.

Harriet Angetile: "We are

developing software to help

and analyse data, which is

Inset: Zambia's international

airports, like KKIA in Lusaka,

keu in the certification

are now fully certified.

process."

PICTURES: ZACL.

African airports capture, store

HARRIET'S SAFETY THIRST...

In her day job, Harriet Angetile is the airport manager at Kenneth Kaunda International Airport (KKIA) in Lusaka, Zambia. However, in November last year, she added new responsibilities at ACI Africa, tasked to lead the African committee in achieving widespread airport safety targets.

Working with the president, Senegal's Ibrahima Wane, and secretariat, Stephane Courtois, they aim to implement targets to promote operational best practices and formulate collective positions for airport operators on issues related to airport safety.

"We arrange to bring regional safety and operational staff together to share industry experiences and challenges, which we recommend to the ACI standing committees," she said.

One of the key tasks Angetile mentioned is providing recommendations on training needs for African airports, and ACI is currently working on ensuring they are all certified.

The goal is to achieve this over the next three years.

There are indications that just under half of all aerodromes in Africa are actually certified.
Considering that the Abuja safety declaration of 2012 targeted all international aerodromes to be fully certified by 2018, the target is still a long way off.

"It is obviously a very sad

development; certification puts an airport on the world map and demonstrates meeting the basic requirements in terms of safety. We know it raises the profile of that airport and, to a considerable extent, gives safety assurance to operators," said Angetile.

She recognised that most airports are struggling due to lack of human and financial resources. In addition, she said frequent changes at management level tended to derail progress in the certification process, along with the lack of political will.

However, she said, ACI Africa has several innovations to assist African airports, such as the Apex safety review, where experts from the industry who are already certified guide others towards certification.

"ACI does help in producing a gap analysis and the findings are given to management for them to take action," she explained.

Angetile reports that this initiative has led to pushing the certification level to the current 45%, but noted that more needs to be done. "We are also developing software to help African airports capture, store and analyse data, which is



key in the certification process," she revealed.

Angetile reckons the biggest challenge facing African airports is infrastructure, the lack of technical know-how, instability in some regions, a lack of information and

communications technology (ICT) development, climate change, communicable diseases in some areas, and the all-important economic and governance challenges.

A collective of these problems creates the perfect storm for the all-too-familiar bottlenecks that trouble African aviation.

"On a positive note, the lack of capacity at most airports to handle cargo and pharmaceuticals presents an opportunity for Africa to develop infrastructure; online procurement presents us with an opportunity as transportation of these purchases will lean towards air transport," she said.

Back in Zambia, there is plenty of work going on to ensure no airport is left behind in terms of safety. "We are bringing it home. It is only natural that our staff here benefit from the subsidised training offered by ACI to build technical capacity," she said.

Angetile reported that Harry Mwanga Nkumbula International Airport in Livingstone and KKIA in Lusaka were recertified late last year and the newly built Simon Mwansa Kapwepwe International Airport in the Copperbelt has now also been certified.

Africa has traditionally been a continent where armed forces bought their weaponry from superpowers or former colonial nations. Now, there is a new kid on the block.

Alan Dron reports.



Why African militaries now want to talk Turkey

urkey has made no secret of its interest in Africa. Its national carrier, Turkish Airlines, has said in recent years that it wants to be the largest airline in the continent – no small ambition when the major Gulf carriers like Emirates and Qatar Airways already have extensive route networks there.

Last November, Spanish current affairs publication, *Atalayar*, noted that Turkey's president, Recep Tayyip Erdogan, has visited more African countries than any other non-African leader and that Turkey has signed military agreements of varying types with most African nations, notably in east and west Africa.

Atalayar also noted that Turkey's weapons exports to Africa, although still relatively small, were increasing rapidly – from \$83 million in 2020 to \$460 million in 2021. A study by the German Institute for International and Security Affairs found that Turkey held less than 1% of arms exports to Africa but described its rapid growth as 'impressive'.

For African nations, buying weapons from Turkey has several advantages. Firstly, the country has advanced significantly in weapons manufacture in recent years and its products have shown their capabilities in several conflicts. Its uncrewed aerial vehicles (UAVs), such as the Bayraktar TB2, played a significant role in Azerbaijan's conflict with Armenia in 2020, destroying many Armenian armoured vehicles.

The Bayraktar TB2 has also been active with Ukraine's armed forces in the current conflict with Russia.

Secondly, Turkey's weaponry, particularly its UAVs, are usually less expensive and easier to operate than those from Israel or the US.

Thirdly, buying from Turkey gives African nations an avenue through which to get modern weaponry without having to 'take sides' between the US, Russia or China.

Atalayar listed Somalia, Togo, Niger, Nigeria, and Ethiopia as buyers of Turkish UAVs. The platforms provide their operators with a relatively inexpensive means of providing surveillance over the continent's vast swathes of scrubland, through which Islamic insurgents often move swiftly by motorcycle.

In a report for the British Broadcasting Corporation (BBC) last summer, analyst Robert Melly, a consulting fellow at the Chatham House research institute in London, noted that Togo had recently received its consignment of Bayraktar TB2s. Togo is facing infiltration by Islamists, while Niger – which has had a major problem with the insurgents for approaching a decade – had opted for six of the Turkish UAVs, said Melly.

"For African buyers, especially poorer countries, drones provide the chance to develop significant air power without the vast cost in equipment and years of elite training required to develop a conventional strike force of manned jets," he noted.

When it comes to crewed aircraft, Turkey is establishing another foothold in Africa with its Hurkus turboprops, which Turkish Aerospace Industries (TAI) is supplying to Chad and Niger.

Hurkus is a tandem two-seat, low-wing, single-engine aircraft designed as a new-generation trainer and also for light-attack and armed reconnaissance missions.

Numbers involved are believed to be small; two Hurkus-Cs to Niger and three to Chad, but more seem likely to follow. Hurkus-C is the armed variant of the Hurkus-B advanced trainer, able to carry up to 1,500kg of weapons.

The Niger machines were due to be delivered at the end of 2022 and follow on from a reported order for 12 of the B trainer version. Those for Chad were due to be delivered in the first quarter of this year, although confirmation of deliveries is awaited.

There have also been several reports that Libya has signed for an unknown number of Hurkus, although this has not been confirmed.

Like Turkey's UAVs, the Hurkus can give small air arms a reasonable capability for a relatively modest price tag. When it comes to combatting Islamic insurgents, high-tech weapons are largely irrelevant; in many cases, the ability to carry unguided bombs, rockets or machine gun pods is perfectly adequate.

DÉFENSE







Jon Lake takes a look at the latest defence stories across the African continent.

Mwari ramping up for more African sales

outh Africa-based Paramount Aerospace Industries has sold an unspecified number of Mwari turboprop intelligence, surveillance, and reconnaissance (ISR) and light attack aircraft to a range of unidentified and unnamed customers.

The company delivered the first production customer aircraft to an "overseas air force" on September 23, last year.

Paramount said that nine customisable Mwaris were on order at the time of last year's Africa Aerospace and Defence (AAD) defence exhibition, for two separate air forces - at least one of them an African air arm.

At least one unarmed, ISR-configured Mwari is known to have been delivered to Mozambique's military for use in the troubled Cabo Delgado region, and the company is known to be in the process of preparing to integrate weapons on to the light surveillance aircraft, and in developing an optionally crewed capability.

Meanwhile, although South Africa has overcome the problems that saw its Gripen fleet effectively grounded, with the award of a threeyear R532 million (\$28.76m) service and maintenance support contract to Saab, similar problems are now affecting other frontline fleets.

A report by Armscor (Armaments Corporation

of South Africa) to a parliamentary committee on February 15 revealed that there are maintenance backlogs on the Gripen, Hawk, Oryx and Falcon aircraft.

It also showed that just seven of the South African Air Force's Oryx transport helicopters and four of 11 Rooivalk attack helicopters are serviceable, and that the remainder are largely grounded, as are four of five C-130 Hercules transports, though the Gripen fighters are now operational again.

The other services are no better off, with the navy having no serviceable submarines, and just one of four frigates available for operations.

Elsewhere, Turkish drones are continuing to find a ready market in Africa, with the class-leading Bayraktar TB2 now in service in Burkina Faso, Diibouti, Ethiopia, Libva, Mali, Morocco, Niger, Nigeria, Rwanda, Somalia, and Togo.

Recently, Turkish Aerospace Industries (TUSA) has started to make headway with its ANKA-S, which has been sold to Algeria and Chad, following the 2020 sale to Tunisia that marked the type's first export contract.

Algeria has also become the launch customer for the larger, twin-engined Aksungur UAV,

having ordered six at the end of last year. Algeria has been steadily building up its UAV capabilities, and has acquired medium-altitude long-endurance (MALE) drones from various countries, including Rainbow CH-3, CH-4B, CH-5, and Wing Loong II aircraft from China, and the El Diazair 54 and 55 – local versions of the UAE's Adcom Systems Yahbon Flash 20 and United 40 UAVs.

Algeria has also deployed its UAVs operationally, and is progressively building up operational doctrine.

In recent years, Algeria has enjoyed a strong relationship with Leonardo Helicopters, which has supplied helicopters to the air force, the navy, the police air wing, and the Gendarmerie Nationale.

There were plans to build large numbers of AgustaWestland AW109s, AW139s and AW101s in a new factory at Aïn Arnat, in the Sétif Province, which was scheduled to become operational in 2021. This was a joint venture between the Algerian Ministry of National Defence (with a 51% share) and Leonardo Helicopters, which signed an industrial and trade partnership agreement in August 2016.

More recently, the Algerian Air Force and Leonardo expressed their intention to finalise a deal for seven AW139 helicopters at the 13th

Bottom left: Algeria looks set to receive its first Beriev Be-200 Altair firefighting amphibian imminently, though sanctions could still upset any transfer of the aircraft. PICTURE: BERIEV. session of the Algerian-Italian bilateral committee held on November 30, 2022 at Palazzo Guidoni, the headquarters of the

The partners "strongly hoped to formalise" a contract for the AW139s by the first half of 2023.

General Secretariat of Defence and the National

Armaments Directorate in Rome.

Algeria is also interested in the Leonardo AW249 NEES (Nuovo Elicottero da Esplorazione e Scorta), a new scout, escort and attack helicopter that made its maiden flight on August 12, 2022.

Still focusing on Algeria, a first Beriev Be-200ES Altair water bomber aircraft for the Algerian Air Force was rolled out at the Beriev manufacturing plant at Taganrog, Russia, in early January 2023.

The aircraft was fully painted in Algerian markings and registered as 7T-VPV. It will be used for training aircrew. A second Be-200ES was expected to roll-out as African Aerospace was going to press.

Algeria ordered four Be-200ES multirole amphibious aircraft from the Taganrog Aviation Scientific and Technical Complex with an option for four more in August 2021, following a series of fires that affected several regions of the country.

The need for some components from Switzerland, including engine vibration control units, cable assemblies, and front and rear support accelerometers, could complicate deliveries, as these may be subject to sanctions and their export to Russia may be prohibited.

The Altair can carry 12,000 litres of water, or up to

72 passengers, and is now in service in Russia and Azerbaijan, while leased aircraft have been used for firefighting in Greece, Portugal and Turkey.

Top left: Resourcing has left the SAAF rotary wing fleet in a parlous state. Only four Rooivalk helicopters are currently operational. PICTURE: SAAF

Bottom right: Niger now has three refurbished C-130H Hercules transport aircraft in service. PICTURE: US AIR FORCE.

Top right: The TAI ANKA-S has recently been sold to Algeria and Chad, following a 2020 sale to Tunisia that marked the type's first export contract. PICTURE: TAI.

In neighbouring Tunisia, the modernisation of the Tunisian Air Force continues apace, with the hand-over of the first of eight Beechcraft T-6C Texan II training aircraft on November 8, 2022. by Textron Aviation Defense.

The aircraft will remain at Wichita for the time being, where training of the initial cadre of instructor pilots began on October 31, 2022.

The aircraft will be augmented by a suite of training devices, including a ground-based training system, an operational flight trainer and a computer-based training lab, to be supplied by TRU Simulation + Training, an affiliate of Textron Aviation.

Eventually, the new trainers will be based at Sfax/Thyna Airbase, where they will equip 13 Squadron.

The US State Department approved a possible foreign military sale (FMS) of 12 T-6Cs to Tunisia on October 10, 2019, subsequently agreeing a deal for four AT-6 Wolverine light-attack versions of the aircraft in February 2020.

The T-6Cs and AT-6Es will replace the Tunisian Air Force's fleet of SIAI-Marchetti SF 260 Warriors (delivered in 1974) and Aero L-39 Albatros jet trainers, which have been in service since 1995.

The US Department of Defense awarded ATI Engineering Services a \$10 million contract to fit an ISR mission system to two Cessna Grand Caravans for Tunisia. This contract seems to have been expanded to cover the conversion of four aircraft.

ATI Engineering Services equipped the aircraft with ISR mission equipment, including an electro-optical/infrared sensor, tactical radio, operator console, video data link and nightvision-compatible lighting.

Textron Aviation subsequently secured a contract from ATI Engineering Services in March 2022 for the delivery of four Cessna 208B Grand Caravan EX utility aircraft to the Tunisian Air

Meanwhile, Niger took delivery of the third and final C-130H in its \$30 million Niger Air Force Hercules programme on December 12, 2022.

The aircraft (a former USAF WC-130H) was delivered to Base Aérienne 101 (BA101) Niamey/Diori Hamani, where it was officially inducted in a ceremony on January 4, 2023. The first aircraft had been delivered on January 4, 2021, and the second on December 7.

The programme also included a training component, spare parts, support equipment and infrastructure at two bases - with refurbished hangars being provided at Niamev and at Base Aérienne 201 (BA201) Agadez, with a new spare parts storage facility at Niamey.

The US has now trained 16 pilots from Niger (including the first female pilot in the air force who completed her training in April 2020), as well as 19 maintenance personnel, five baggage handlers and a flight engineer.





Money talks as Africa misses out on star trainers

ome 17 African air forces have no fixedwing training aircraft at all, and 10 more have fewer than half-a-dozen training aircraft on charge.

Many air arms rely on sending pilots overseas for training, principally to China and Russia, though others are making efforts to improve their in-country training, sometimes by recapitalising their training fleets.

Sadly, the leading aircraft in the global training market are mostly notable by their absence in Africa, due mainly to budgetary constraints. There are, thus, no Pilatus PC-21s, no KAI T-50s, and no Leonardo M346s in service with African air forces

Instead, some of the most numerous training aircraft include the SIAI Marchetti SF260 (about 114 in use), the Pilatus PC-7 (80), the Embraer EMB312 Tucano (82), the Aero L-39 Albatros (119), and the Hongdu K-8 (182).

There are also a plethora of (often much older) aircraft types, which serve in much smaller numbers - from South Africa's and Zimbabwe's BAE Systems Hawks; Dassault Alpha Jets in

Cameroon, Togo and Egypt; Soko G-2 Galebs in Libva: and a handful of MB326s and MB339s in Togo and Eritrea.

There are even SOCATA TB30 Epsilons in Senegal and Togo – though these serve only in very small numbers. Most of these types are nearing the end of their lives – even where the individual airframes have hours left 'on the clock', they are becoming increasingly difficult to support and sustain.

Perhaps surprisingly, in view of the climate, relatively large numbers of carbon fibre composite Grobs are in service, with 74 G115s in Egypt, six G120TPs in Ethiopia, and five G120As and nine G120TPs in Kenya, with two more G120TPs on order.

The popularity of the SF260 was due to its performance (the aircraft was famously described as "the fastest normally aspirated piston single in production"), its ability to operate from short and semi-prepared runways, and its simple but rugged all-metal airframe. The type will not be easy to replace, and especially not at an affordable price.

The large number of L-39s is a result of the type's status as the standard Soviet/Warsaw Pact trainer, which led to it being supplied to many developing world nations as part of military aid packages, either free of charge or at highly subsidised prices.

The K-8 has similarly sometimes been supplied as part of Chinese air packages, but has also found a niche in direct commercial sales, thanks to its very low price.

Both the L-39 and the K-8 have also provided a useful light attack capability, and not all of the aircraft in service in Africa are used for advanced

In Nigeria, for example, it is armed jet trainers, in the form of the L-39 and Alpha Iet, that have shouldered much of the burden of combat operations against Boko Haraam and other insurgents.

The Chinese Hongdu L-15 may well prove to be the K-8's natural successor, having already found a berth with the Zambian Continued Air Force, while the Yak-130

promises to be the trainer of





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choice for any air force still wedded to Russian equipment. Some 16 of the latter are in service with the Algerian Air Force.

The Guizhou JL-9, also known as the FTC-2000 Mountain Eagle, is in service in Sudan, and represents another option for advanced and weapons training.

It was developed from the JJ-7/FT-7, the two-seat trainer version of Chengdu J-7, which was a Chinese derivative of the MiG-21. The FTC-2000 has a new wing, forward fuselage, glass cockpit and air intakes married to the engine, empennage, and controls of the JJ-7/FT-7.

Of the newer trainer aircraft, the Embraer EMB314 Super Tucano has enjoyed some sales success in Africa, though primarily as an operational close air support and light attack aircraft, while Turkey's Hürkus has similarly been sold in Africa in its armed form.

The number of Hürkus aircraft ordered by Niger and Libya has not been announced, but Super Tucano deliveries to African customers now exceed 34 aircraft.

In July 2011, the Mauritanian Air Force announced that it was considering the acquisition of Super Tucano aircraft. Negotiations for four of the type started in December 2011, and on October 19 2012, Embraer delivered the first EMB-314, fitted with a FLIR Safire III infrared turret for border surveillance operations.

Three more were delivered to the Burkina Faso Air Force's Escadrille de Chasse at Ouagadougou Airbase in September 2011. Six A-29B aircraft were ordered by the National Air Force of Angola, and the first three were delivered to the 8th Training Squadron on January 31 2013.

Five aircraft were ordered by the Ghana Air Force at the Paris Airshow in June 2015, for a reported contract value of \$88 million including logistics support and a training system for pilots and mechanics in Ghana. The first aircraft arrived in the second half of 2016, and the Ghana Air Force has plans to acquire four additional Super Tucanos.

Four A-29s were delivered to the Mali Air Force in July 2018. Six were originally ordered



In situ: The first T-6C Texans have now been handed over to the Tunisian Air Force. PICTURE: TEXTRON

but this was reduced to four due to budgetary constraints.

Nigeria purchased 12 Super Tucanos from Sierra Nevada for \$329 million in November 2018. The first batch of six, all fitted with forward-looking infrared systems, were delivered in July 2021.

Brazil once planned to donate three EMB-312s to the Mozambique Air Force, but this was cancelled by the Brazilian Government in 2016.

Senegal also narrowly avoided becoming a Super Tucano operator. Senegal was said to have been the fourth African nation to order the Super Tucano, but the contract was not finalised and Senegal, instead, opted for four KT-1s from Korea.

In north Africa, the Textron T-6C serves with Morocco (which purchased 24 for the Royal Moroccan Air Force in October 2009), and is now entering service in Tunisia.

The US State Department approved the possible foreign military sale (FMS) of 12 T-6Cs to Tunisia at an estimated cost of \$234 million in October 2019, including related spares, ground support equipment, and support.

The first of eight T-6Cs for No 13 Squadron at Sfax Airbase in Tunisia (and the 1,001st T-6 built) was handed over in November 2022, and

four more AT-6Es will be delivered for weapons training. These will bring the African T-6 fleet to 36 aircraft!

The new aircraft was used for training of the initial cadre of instructor pilots, which began on October 31 at Textron Aviation Defense facilities in Wichita, Kansas. A second aircraft was delivered later in 2022. More T6s were expected to arrive in Tunisia as *African Aerospace* was going to press.

The aircraft are augmented by a suite of training devices being supplied by TRU Simulation + Training, an affiliate of Textron Aviation.

The ability of aircraft like the Super Tucano and T-6C to perform flying training and light attack/counter-insurgency (COIN) missions makes them particularly attractive in the African context, and may lead to further orders, though the parlous state of many local defence budgets may make any new procurements problematic.

Pakistan's Super Mushshak (a derivative of the Saab MFI-15/17 Supporter) has won an order for 10 aircraft for Nigeria, where the type's distant predecessor, the MFI-9B MiniCOIN had played a starring role in the Nigerian Civil War from 1967-1970. The aircraft would seem to be a good fit for African training requirements, but the type has yet to make a real breakthrough in the region.

Some of today's advanced jet trainers could still find a home in Africa, but probably as frontline light combat aircraft, providing a cost-effective replacement for the various F-5Es and Russian-built Sukhois and MiGs now serving with many African air forces.

Armed variants of the KAI FA-50, the M346FA, and even of the new TAI Hürjet offer a compelling blend of air-to-air and air-to-ground capabilities, but it remains to be seen whether they are affordable enough for African air arms.

In some north African air forces, they could offer a useful means of augmenting frontline fast jets, or downloading training from frontline aircraft types.

As African air transport bounces back from the pandemic and starts to grow again, training opportunities are resurfacing within the continent. **Anuradha Deenapanray Chappard** reports.

How Africa can help ease the skills shortage



Upskilling: IMA offers tailormade qualifying training in specific fields at its training centre in Morocco. PICTURE: PVA SERVICES.

s the industry plans to support a near doubling of passenger and cargo numbers by 2036, demand for well-trained and highly skilled pilots, engineers, air traffic controllers and other aviation-related jobs is expected to rise dramatically, especially in the post-pandemic era.

A recent Boeing pilot and technician outlook projects a

chronic shortfall of 20,000 pilots, 26,000 cabin crew and 21,000 technicians between 2022-2041 in Africa.

To help combat this, France-based Airways Aviation – ESMA has announced the launch of new training activities in Africa.

The organisation's strategy is to match the rapidly increasing demand for commercial and military pilots, ground handlers and cabin crew.

Airways Aviation has several training centres in the Middle East and north Africa, including Dubai, Istanbul, and Beirut, as well as in India, France and Australia.

"We aim to help make Africa a desirable and credible destination for training with a high degree of focus on professionalism, quality and safety," said Romy Hawatt, founder and president of Airways Aviation – ESMA, one of the largest privately owned groups of multidisciplinary aviation academies.

Airways Aviation – ESMA started its bespoke pilot foundation course in February, followed by cabin crew training courses in Dakar (scheduled for this month as *African Aerospace* was going to press). Cabin crew theory classes are based on the European Aviation Safety Agency (EASA) curriculum and will be available to students at select locations across west Africa initially.

"Cabin crew students will have the choice of either completing their theory and practical training in Africa, or undertaking the practical training component at the world-class Dynamic Advanced Training facilities in Dubai," said Hawatt. Noureddine Mouaddib, president of the University of Rabat, had highlighted the growing training problems as early as 2019, at the Middle East and North Africa Business Aviation Association (MEBAA) conference in Marrakech. He underlined: "There can be no development without human resources qualified and equipped with the skills required in such a cuttingedge field as aeronautics. It is vital to train to perform."

The biggest challenge is to increase the number of trained executives and to attract, or even encourage, skills from higher education institutions and universities to move into the aviation sector.

However, there is some good news as aviation training is gaining momentum in Africa.

In Senegal, President Macky Sall confirmed, during the delivery of the first A220 to Air Senegal, the launch of the first promotion of pilot students and aerospace MRO students from the national airline's training school.

They joined Senegal's International Academy of Civil Aviation Trades (AIMAC) in collaboration with the country's air force and Blaise Diagne International Airport (AIBD). They will support Air Senegal's needs for pilots, engineers and maintenance technicians.

The objective of this partnership between the Air Force School and Air Senegal is to lay the foundation with Senegalese youth for the country's air hub.

Ethiopian Airlines, meanwhile, has inaugurated its new aviation training centre in Hawassa. This is the second Ethiopian Aviation Academy campus and it will offer pilot training programmes.

The facility accommodates classrooms, three training simulators, three aircraft parking and workshop hangars, trainees' and instructors' dorm rooms, a cafeteria and sports facilities

"We are determined to reach more people who dream of becoming aviation professionals and enrich our continent with qualified personnel who will take Africa's aviation to the next level," said Ethiopian Airlines Group CEO, Mesfin Tasew.

In Morocco, the IMA and ISMALA training institutes are at the heart of the aeronautical ecosystem.

IMA offers tailor-made qualifying training in specific fields – boilermaking, composite assembly, machining and electrical systems. Profiles are made by IMA and the manufacturers, and students are immediately operational to work in an aerospace workshop.

"IMA is now setting records with nearly 2,000 students who have received training courses," said the organisation's director general, Patrick Ménager.

"Prospects for 2023 are on the rise and more than 2,200 students will be trained in our institute. We are clearly able to meet and adapt to the needs of manufacturers based in Morocco. It is really a win-win approach."



Cost-effective: The Guizhou JL-9 or FTC-2000 combines affordability with high performance, and could prove a compelling alternative to the L-15. PICTURE: EGYPTIAN MOD.

ÉVÉNEMENTS **MRO**

UNE PORTE OUVERTE POUR CONSTRUIRE L'AVENIR

Le GIMAS a organisé la première édition de l'Aerospace African Forum à Casablanca, au cœur de la dynamique aérospatiale du Maroc, en février dernier. Un reportage d'Anuradha Deenapanray Chappard.

Cette première édition de l'Aerospace African Forum intervient à un moment opportun où le secteur du transport aérien montre des signes positifs de reprise sur le continent. Cet événement a pour vocation d'être une plateforme continentale de réflexion et d'échange entre les principaux décideurs d'Afrique.

Il souligne également l'engagement du Royaume sur la voie de la modernité et de l'ouverture dans le cadre d'un développement économique et social inclusif et

Pour le ministre du Transport et de la logistique. Mohammed Abdeljalil, « le Maroc continuera de conduire une politique ambitieuse de libéralisation du secteur aéronautique qui a permis de réaliser un développement tangible du transport aérien international ».

En 2022, les aéroports du Maroc ont enregistré un trafic aérien commercial de 20,5 millions de passagers. Cela représente un taux de récupération de 82 %, par rapport à la même période de 2019. Le trafic devrait se rétablir complétement en 2024, selon le scénario de base, soit un trafic de 24 millions de passagers en 2023, 26 millions en 2024 et 28 millions en 2025.



The appliance of science: The Aerospace African Forum scientific board. PICTURE: PVA SERVICES.

Cette reprise est aussi une source de satisfaction pour Ryad Mezzour, ministre de l'Industrie et du

« Nous sommes de retour. l'industrie est de retour. C'était long, très long, lourd, difficile. La meilleure nouvelle pour moi, en tant que ministre de l'Industrie dans un pays qui a une plateforme très compétitive dans l'industrie aérospatiale, c'est que nous avons besoin de plus d'avions. Nous sommes prêts à produire avec la meilleure qualité et aux meilleurs prix. D'énormes opportunités s'ouvrent à nous », dit-il.

MOROCCO HOSTS FIRST AEROSPACE AFRICAN FORUM

The Moroccan Aerospace Industries Association (GIMAS) organised the first Aerospace African Forum in Casablanca in February 2023, celebrating that the continent's air transport sector is showing positive signs of 'post-pandemic' recovery.

This event aims to be an ongoing continental platform for reflection and exchange between the main commercial aviation decision-makers in Africa.

The location also underlined Morocco's commitment to the path of modernisation and openness within a framework of inclusive and sustainable economic and social development.

Morocco's Minister of Transport and Logistics, Mohammed Abdeljalil, explained that his country will continue to pursue an ambitious policy of liberalisation within the aeronautical sector, made possible by the positive development of international air transport.

In 2022, Morocco's airports recorded commercial air traffic of 20.5 million passengers, representing a recovery rate of 82% when compared with 2019. It is anticipated that traffic should fully recover in 2024.



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El-Khafif looks to engineer something special

Cairo calling: EgyptAir M&E already serves more

than 20 African airlines at its Cairo base.

Start-up airlines in Africa can expect keen interest from EgyptAir's MRO arm, as Chuck Grieve and Keith Mwanalushi have been hearing from the organisation's new head, Walid El-Khafif.

frica is the "MRO market of the future" so it stands to reason that when one of the continent's leading maintenance and engineering operations makes plans for expansion, it would look close to home.

Engineer Walid El-Khafif, the new chairman and chief executive of EgyptAir M&E, says there is a "great opportunity to serve our African neighbours" in line with the Egyptian Government's ambition to further economic integration in the African

There's a long history of cooperation between airlines in the countries of the Middle East and Africa, particularly from the Arab region, explained El-Khafif.

"We are located in a region rich with aviation industry supporters and we witness the birth of new airlines frequently. Under our new strategy to expand, we are working on developing plans to pay attention to start-up airlines."

Start-ups, he added, face a "difficult equation" balancing cost and quality. His company, he said, has the solution – international standards at competitive rates, a portfolio of major airline customers, plus close geographic proximity.

El-Khafif succeeded Yehia Zakaria, who was promoted to lead the EgyptAir holding company, at the tail end of the pandemic in October last year.

ork under way: A Trent 700 engine und

overhaul at the EgyptAir M&E facility in Cairo

Khafif, the new chairman and

M&E, sees a "great pportunity to serve our African neighbours".

"Securing the supply chain was, and still is, the main priority," he said. "Following the pandemic and the stagnation it caused, it was clear that ramping up again would put pressure on MRO services and the spares supply chain, given the huge losses in the aviation industry."

El Khafif now sees a steady recovery in operations. "There is strong demand for MRO services, especially for narrow-body fleets," he said.

The hangars in Cairo are filling up again; recently spotted coming in included a FlyNas A320, the second of three aircraft scheduled for services at EgyptAir's maintenance facility, and a Tunisair A330, also in the facility undergoing a C-check.

El-Khafif said the company's post-Covid strategy included expanding EgyptAir M&E's African network of

Continued line maintenance stations on Page 38 and attracting African



MRO

CONTINUED FROM PAGE 37

customers for base maintenance at its Cairo headquarters.

The company moved in that direction last March, when it opened its full-service MRO facility at Kotoka International Airport (KIA) in Accra. The new hangar supports the EgyptAir fleet operating into the Ghanaian capital, in addition to providing line maintenance for Qatar Airways aircraft, the station's first third-party customer.

El-Khafif is proud that the MRO division already had a wide scope of capabilities, handling almost all modern fleet types up to heavy checks and line maintenance. In fact, prior to the pandemic, there were plans to expand the line maintenance business at 12 African airport destinations – but the company has had to scale back on those for the time being.

However, in addition to Sudan capital, Khartoum, there are plans to possibly re-open the line maintenance station at Asmara in Eritrea during the first half of this year.

A visit through the engine shop in Cairo saw CMF56-7B, V2500, and Trent700 engines going through various stages of checks. "In addition, we have very strong capability for different C ratings covering thousands of part numbers, and specialised services, such as non-destructive testing (NDT), borescope and calibration all complementing our service portfolio," El Khafif noted

The company is pushing its paint stripping and repainting product to a new level of quality as part of the new heavy maintenance complex it has developed in Cairo, upgrading many of the C rating capabilities as well.

Elsewhere, El Khafif is keen to expand via cooperation and partnerships, especially to strengthen aviation services in Africa.

The company recently signed a partnership with Petra Aerospace of Jordan that will extend the capabilities of the Egyptian MRO's engine services for repair and overhaul of CFM56-3 engines. He said the extension of engine services with Petra would also include engine teardowns at the Cairo facility.

This will no doubt benefit the region, which requires improved access to used serviceable materials, pooling and parts exchanges in local markets.

Other recent signings include a memorandum of understanding (MoU) with US company United Aviation Solutions to cooperate on aircraft, engines, and component repair and overhaul, along with marketing the capabilities of EgyptAir's maintenance division's workshops in the US.

El Khafif also confirmed the company was exploring opportunities for further cooperation with Serbian MRO, JAT Tehnika, to seek added value and synergies.

He said several African airlines were currently customers, pointing out that EgyptAir M&E was



Engine upgrade: EgyptAir's El-Khafif (seated left) signs an agreement with Petra Aerospace of Jordan at MRO Africa.

PICTURE: EGYPTAIR M&E

BRINGING VAST EXPERIENCE

Engineer Walid El Khafif brings more than 30 years' experience to his new role, having joined the national carrier in 1989 as an airframe system engineer.

He became a supervisor in 2007 before his promotion in 2010 to technical services director.

During his career, he has been a key member of company development projects, including selection of new aircraft and engines for EgyptAir, developing the MRO supply chain, and implementing digital maintenance applications.

providing them with technical services and solutions, such as base maintenance checks, engines repairs and overhaul, components repair, components pool solutions and consultancy service for CAMO, and other fields related to technical support.

El Khafif is aware that challenges in the MRO industry persist on several fronts. Some airlines have reported problems, for example, with parts availability for the A220, and this has led to several of these aircraft being parked in storage.

"The key issue we have with the A220 fleet actually relates to the availability of engines," he explained. "We are working closely with the engine OEMs to find solutions to this problem and we are hoping to find a resolution soon."

There have been numerous reports of trouble with Pratt &Whitney's GTF engines that power A220s by different operators, like Air Tanzania, which cited flight cancellations and delays to operations due to technical issues with the powerplants.

Looking inwards, studies are taking place to evaluate upgrading the cabins of the four A330s

in the EgyptAir fleet and, considering there is a wait of around two years for any possible new equipment in that size category, the upgrades look likely.

In February, the airline also took delivery of its first A321neo and, in March, launched dedicated freighter operations with a converted Boeing 737-800SF.

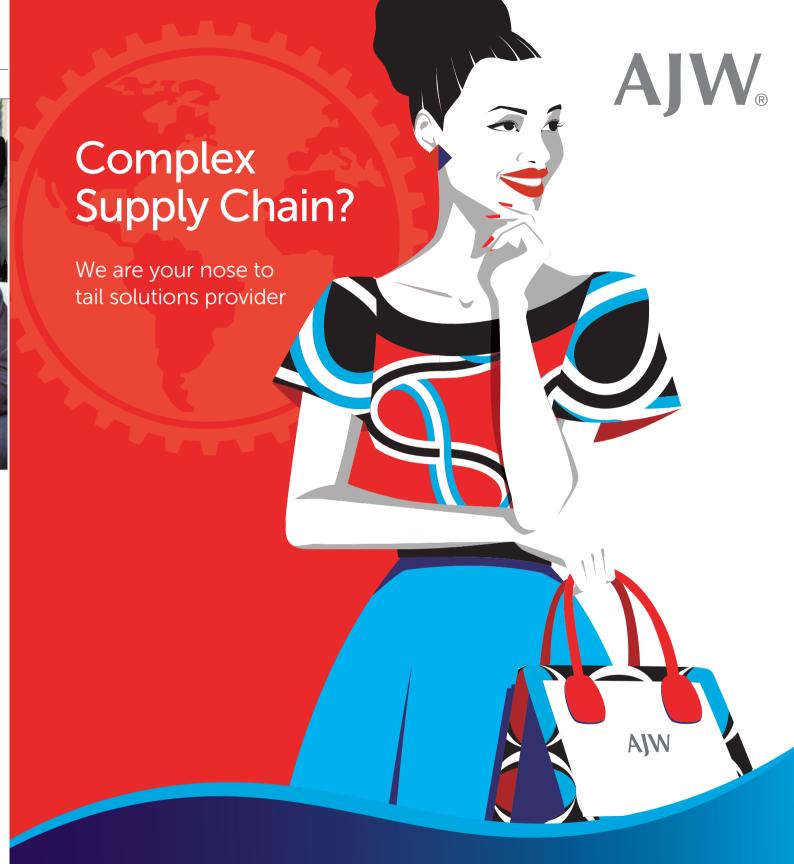
Other future plans may include performing passenger-to-freighter conversions in house based on market demand but, predominately, for EgyptAir and other operators too.

Speaking at the recent MRO Africa event in Cairo, of which EgyptAir M&E was a sponsor, El-Khafif re-affirmed the company's commitment to Africa, pointing out that the company already served more than 20 of the continent's airlines.

The Accra outstation, he said, was the start of a long-term plan to expand inside the continent to serve the goals of development and promotion of the African MRO industry.

"This keenness to be the MRO partner of as many African airlines as we can is based on our belief that our role in supporting the industry should be matching with our long history and leading profile in the market.

"Thus, we have an additional strategy to work on moving our knowledge to the emerging counterparts inside the continent through partnerships that include intensive training... to create entities capable of covering the technical services for the growing fleets of the continent," he concluded.



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MRO



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business for nearly
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PICTURE: AERO
CONTRACTORS.

Could Nigeria become an MRO giant?

According to industry experts, Nigeria is strategically positioned to serve as an aircraft maintenance repair & overhaul (MRO) hub for the entire west African region.

Chukwu Emeke looks at the possibilities.

The Nigerian Government, as far back as 2016, made a case for the establishment of a comprehensive MRO facility through a public private partnership (PPP) arrangement.

Even though this proposal is yet to translate into reality, there have been pockets of efforts to address aircraft maintenance needs in Nigeria.

The need is obvious. The Nigerian Civil Aviation Authority (NCAA) currently records 23 active domestic airlines and 913 licenced engineers in its records.

Intensive maintenance supervision has, in recent years, become increasingly crucial, especially for scheduled passenger airlines in the sub region, some of which operate aircraft that are more than 15 years old.

According to Oladeji Folayan, a certified airline auditor, a scheduled passenger airline with more than five aircraft in its fleet is expected to own an aircraft maintenance facility. However, some airlines in the west and central African sub region do not have approved maintenance organisation (AMO) status.

Scheduled commercial airlines in Nigeria conduct their major maintenance checks overseas, spending huge sums of money that could have been saved in foreign exchange, and losing job opportunities to foreign service providers.

It is estimated that if a well-equipped MRO centre was established in the country, it could produce savings of \$12 million annually.

Overseas aircraft maintenance, purchase of spares, aircraft leasing and simulator training, combine to add demand pressure to the value of the Nigeria naira, thereby affecting the entire economy negatively.

However, there are some pockets of good news. For example, 59-year-old Aero Contractors, based at Murtala Muhammed International Airport, has NCAA's AMO

certificate and provides B737 classic C checks, offering both line and heavy maintenance services.

Apart from B737 classic, the company has carried out maintenance checks on Bombardier Q300, Q400 and other aircraft types for companies in Nigeria, Ghana and the DRC, using its technical and engineering manpower.

Another certified private AMO in Nigeria is 7 Star Global Hangar, which provides aircraft repair and maintenance services, covering A to D checks, inspections, and support.

In December last year, it successfully conducted C-check maintenance for MD83 aircraft operated by Nigeria's Dana Air.

Victor Attah International Airport in Uyo, Nigeria, has a state government-owned MRO hangar, built for maintenance of two B747 aircraft, A320-300 series and all CRIs.

The government has a partnership deal with Airbus to train specialised technical personnel for the facility.

Because of the huge volume of capital required to set up a comprehensive MRO facility, which involves a long gestation period before expecting a return on investment, many MROs take advantage of grants or partnerships as opportunities for start-ups.

Amos Akpan, lead consultant of the Etimfri aviation group, believes the government should provide support and enable the growth of the available facilities in Nigeria into world-class facilities. He called on the government to move from proposals to workable ideas, using what is available as launchpads. He also called for more investment in training infrastructure for maintenance personnel at aviation training institutions in Nigeria.

Sani Ahmadu, director of business development, corporate affairs at 7 Star Global Hangar, believes that, with collaboration, the industry will witness a cost-saving culture capable of sustaining airlines in the country.

Meanwhile, Achuzie Ezenagu, chief executive officer of Toucan Aviation Support Services, also made a case for cooperation between government and industry stakeholders as a response to the cost-intensive nature of MRO investment.

Apart from saving foreign exchange, creating an MRO hub for Nigeria would, believe the experts, provide employment, encourage skills acquisition and technology in the entire region, enable the regulatory authorities to monitor more closely the airworthiness of aircraft, and also cut costs for airline operators.

V It is estimated that if a well-equipped MRO centre was established in the country, it could produce savings of \$12 million annually. ▲

MECACHROME EXPANDS ITS FOOTPRINT IN TUNISIA

French-based precision engineering company, Mecachrome, has continued its transformation plan with the acquisition of Techni Protec Metal (TPM) in Sousse, Tunisia. **Anuradha Deenapanray Chappard** reports.

Mecachrome, probably best known for its work in Formula 1 motorsport, is mainly present in the fields of aeronautics, defence, naval, energy and space.

Over the years, it has become a world leader in high-precision mechanics and specialises in the machining of mechanical parts and assemblies.

It works with the likes of Airbus, Safran, Rolls-Royce, Bombardier, Thales, and Dassault.

Mecachrome chairman, Christian Cornille, said the acquisition of TPM would reinforce the industrial capacity of the group. "We are continuing to consolidate our know-how and our surface treatment capacities. These activities are already present at our sites in France and Morocco," he added.

TPM is a member of the Tunisian Aeronautical and Space Industries Group (GITAS). It

specialises in surface treatment, painting, and non-destructive testing.

"Mecachrome will bring more agility and strengthen our leading position on the Tunisian market," said Flavien Quesne, chairman and CEO of TPM.

With the support of its shareholders, Tikehau Ace Capital and Bpifrance, Mecachrome recently announced a majority stake in Groupe Rossi Aero, which is involved in the on-demand manufacturing of parts and equipment for original equipment manufacturers (OEMs) and maintenance, repair and overhaul (MRO) operators.

Mecachrome also confirmed a merger with WeAre, a specialist in the manufacture of high-tech mechanical parts and complex sub-assemblies, at the end of August. The deal meant that it had become one of the five largest manufacturers of parts for the aeronautics sector.



Christian Cornille: "We are continuing to consolidate our know-how and our surface treatment capacities."



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SÉCURITÉ PERSONNES

L'Air Investigation Bureau (AIB) du Nigeria a amorcé une importante transformation depuis la nomination d'Akin Olateru U à la tête de l'institution en 2017. Un reportage de **Romuald Ngueyap**.

UN GRAND PAS VERS LA PERFORMANCE

e Nigeria peut se prévaloir que l'AIB a acquis une expertise solide. Depuis arrivée en 2017, Akin Olateru a fait un état des lieux et défini les opportunités auxquels l'AIB était confronté.

« Nous avons constaté qu'il fallait orienter nos efforts d'amélioration sur quatre principaux axes : les infrastructures, les équipements, le capital humain et les procédures », assure Akin Olateru.

L'AIB a aujourd'hui amélioré ses enquêtes sur les accidents au Nigeria, au point de se positionner comme une référence africaine. «Depuis 2017, nous avons publié 65 % du nombre de rapports ».

Akin Olateru attribue ces performances d'une part à l'acquisition d'équipements de dernière génération. « Notre laboratoire de sécurité des vols utilisé pour extraire les données des boites noires est le premier en Afrique. Il est classé parmi les meilleurs au monde ».

L'AIB du Nigéria a d'ailleurs été sollicité par le Cameroun pour travailler sur le crash du DHC-6-400 de la compagnie Caverton en mai 2022. Il a aussi mis son expertise à contribution au profit de Sao Tomé et Principe.

Pour une efficacité de terrain, l'Agence dispose désormais de plusieurs unités : son quartier général d'Abuja, des bureaux à Lagos, Kano et Enugu. « Nous avons par ailleurs créé une plateforme digitale de notifications des accidents et incidents. Celle-ci permet aux usagers de l'air et même aux passagers de faire remonter rapidement l'information ».

Akin Olateru estime que le renforcement des compétences du personnel joue également un rôle crucial dans la réussite de l'AIB. « Nous avons près de 45 enquêteurs qualifiés. Nous les formons à l'Université de Cranfield (Royaume-Uni), à la Southern California Safety Institute (États-Unis). Nous collaborons également avec le NTSB».

Cette expertise permet aujourd'hui d'investiguer et de publier les rapports dans un délai de 18 mois. L'AIB du Nigéria

compte prendre le leadership sur le continent. « Nous inaugurerons la première école africaine de formation aux enquêtes sur les accidents en Afrique basée à Abuia ».

Un MoU a été signé avec le Bénin, une démarche similaire est en cours avec la Sierra Leone. L'AIB a également aidé la Gambie à mettre en place une agence d'enquête sur les accidents. Elle a aussi des accords avec le BEA en France et le NTSB aux États-Unis ».

L''AIB va étendre ses compétences pour couvrir les accidents multimodaux du secteur maritime, ferroviaire, routier.

SUMMARY

TRANSFORMING NIGERIAN ACCIDENT INVESTIGATION

Nigeria's Air Investigation Bureau (AIB) has undergone a major transformation since the appointment of Akin Olateru as the organisation's head in 2017.

Since arriving, Olateru has undertaken a complete audit of the organisation, identifying issues and subsequently defining the future opportunities available.

"We found that we had to focus our improvement efforts on four main areas – infrastructure, equipment, human capital, and procedures," he explained.

Olateru also hailed other improvements. "The flight safety laboratory that we use to extract data from black boxes is the first in Africa and is ranked among the best in the world."

The AIB was asked by the Cameroon authorities to work on the crash of Caverton's DHC-6-400 in May 2022; it has also put its expertise to work for the benefit of Sao Tome and Principe.

To maximise efficiency, the agency now has several units, with

its HQ in the capital, Abuja, and additional offices in Lagos, Kano and Enugu. "We have also created a digital platform for accident and incident notification that allows users – and even passengers – to report information," he said.

Olateru believes that strengthening staff skills also plays a crucial role in the success of AIB. "We have around 45 qualified investigators and we train them at the UK's Cranfield University and at the Southern California Safety Institute in the USA."

The organisation has inaugurated the first African accident investigation training school in Africa, based in Abuja.

An MoU has been signed with Benin, and a similar negotiation is under way with Sierra Leone. The AIB has also assisted The Gambia in setting up an accident investigation agency.

The AIB will also be extending its skills to cover serious accidents in the maritime, rail, and road sectors.

ROMUALD NGUEYAP



Nous
inaugurerons
la première
école africaine
de formation
aux enquêtes
sur les
accidents en
Afrique basée
à Abuja. ▲

AKIN

OLATERU

PICTURE: AIB

Préparer la prochaine génération de professionnels de l'aviation et de l'aérospatiale en Afrique. C'est la noble cause à laquelle s'investit Mercy Makau depuis une dizaine d'années déjà. Un reportage de **Romuald Ngueyap** depuis le Salon Aviation Africa.

La mission de Mercy - préparer la prochaine génération

Le constat est sans appel : il y a une réelle pénurie de personnel dans l'industrie aéronautique africaine. Mercy Makau a chosi de s'engager depuis une dizaine d'années pour combler le fossé. Cette kenyane a mis sur pied à Nairobi en févier 2022 la « Young Aviators Club of Africa » (YACAfrica), une association à but non lucratif.

« Nous préparons les jeunes à entrer dans l'industrie aéronautique et aérospatiale afin d'assurer la disponibilité continue de professionnels formés, qualifiés et expérimentés », explique-t-elle. Il y a urgence. Selon les projections de Boeing pour les vingt prochaines indique que l'Afrique aura besoin de près de 67 000 personnes dont 20 000 pilotes

La démarche de YACAAfrica repose sur un système de mentorat dans le cadre d'un programme basé sur les STEAM (Science, Technology, Engineering, Arts, Mathematics).

Sur le terrain, cela se décline par la facilitation et la promotion de l'innovation et la créativité, la mise en place des bourses d'études via des partenariats noués. Il y a également l'implication et la participation des jeunes aux événements aéronautiques et spatiaux. « Ces leviers sont primordiaux pour créer les bases nécessaires à notre future main-d'œuvre ».

Nous préparons les jeunes à entrer dans l'industrie aéronautique et aérospatiale afin d'assurer la disponibilité continue de professionnels formés, qualifiés et expérimentés.

Aujourd'hui, YACAfrica est implantée dans plusieurs pays sur le continent.

« Nous disposons d'unités au sein des universités, des écoles et des académies. Nous avons des discussions très constructive pour renforcer notre présence en Ouganda et au Rwanda et établir de nouvelles sections au Gabon, au Ghana et au Sénégal».

YACAfrica compte aujourd'hui plus 60 000 membres pour les étudiants agés de 4 à 27 ans. « Ces derniers sont « coachés » par près de 900 volontaires principalement issus de l'aviation civile. Ils prennent de leur temps pour partager leurs expériences ».

L'Association s'est vue décerner deux prix OACI ayant remporté des compétitions sur l'innovation.

Mercy Makau insiste sur la promotion de la culture de la paix et du volontariat, la tolérance, l'acception des différences et surtout les enjeux environnementaux. Elle veut également se positionner comme un pont entre le monde académique et l'industrie.

YACAA mène des actions en accord avec l'initiative NGAP (Prochaine Génération de Professionnels de l'Aviation) de l'OACI. Pour cela, Mercy Makau multiplie les contacts avec les acteurs de l'industrie. Leur soutien est essentiel.

MERCY'S MISSION – TO PREPARE THE NEXT GENERATION

For the past decade, Kenya's Mercy Makau has been helping to prepare the next generation of African aviation and aerospace professionals.

There is a shortage of personnel in the continent's aeronautical industry and Makau decided to help to fill the gap by setting-up a non-profit organisation in Nairobi called Young Aviators Club of Africa (YACAfrica).

Today, YACAfrica is established in several countries on the continent.

"We prepare young people to enter the aviation and aerospace industries to ensure the availability of trained, qualified and experienced professionals," she explained.

And the need is urgent. According to Boeing's projections for the next 20 years, Africa will need around 67,000 people in the industry, including 20,000 pilots.

In practice, this involves facilitating and promoting innovation and creativity by setting up scholarships through established partnerships. There is also the involvement and participation of young people in aeronautical and space events. As she said: "These levers are essential to create the necessary foundations for our future workforce.

"We have units within universities, schools and academies and are having constructive

discussions to strengthen our presence in Uganda and Rwanda – and also to establish new branches in Gabon. Ghana and Senegal."

YACAfrica now has more than 60,000 members, including students aged from four to their late 20s. "The older students are coached by around 900 volunteers, mainly from civil aviation, who all give their time to share their aeronautical experiences."

The association has been awarded two International Civil Aviation Organization (ICAO) awards for winning innovation competitions.

Makau insists on the promotion of the cultures of peace, voluntary work, tolerance, cultural differences and environmental issues. The organisation also positions itself as a bridge between the academic world and industry.

YACAfrica acts in accordance with the ICAO next generation of aviation professionals (NGAP) initiative and also maximises contacts with industry players as their support is essential.



PICTURE: YACAA.

ALL IN A DAY

Danny Vranckx

Marcelle Nethersole speaks to the CEO of Aviaco GSE.

Can vou tell me what Aviaco GSE does?

Aviaco is essentially a one-stop-shop for anyone looking to acquire ground support equipment (GSE).

Our core business is equipment refurbishment but we also offer a wide range of tailored equipment rental and leasing plans, repair and maintenance services. spare parts supply, and technical support. In short, everything to ensure the reliability of a customer's GSE on the ramp.

Because we have facilities in Holland, Belgium, Spain and the Middle East, with agents covering other key geographical areas, we are ideally placed to respond quickly to any customer enquiry.

What work does Aviaco GSE do in Africa?

We have made great progress in Africa: this has been in part due to our technical assistance on site (TAOS) concept, where we can set up a workshop to help locally with all aspects of technical support

This has the effect of bringing the Aviaco factory direct to the customer, and is especially useful in the more strategically remote locations.

Aside from TAOS, we provide a full range of support services for all our African customers

Does the company face any challenges working within Africa?

These days there are no great challenges for Aviaco as we look back on more than 30 years' experience in over 40 countries within Africa.

Our products, particularly refurbished GSE, are known throughout the continent and repeat orders are evidence of the successes we have experienced there.

In fact, it has been gratifying to see the progress made in the aviation sector within the continent over the last couple of decades, and we are proud to have assisted in that transformation.

I understand sustainability is key to your company. How is this applied?

Sustainability is the word on everyone's lips today and you could argue that it is embedded within our DNA.

Aviaco started work on some revolutionary sustainable projects during the pandemic and this part of our operation has grown exponentially. To get the best results, we have been collaborating with a young team of technical engineers from the company XYZ Dynamics, which is based in the Netherlands.

As a specialist in refurbished GSE, the very nature of what we do underlines our commitment to the

For many years we have selected tired GSE and breathed new life into the units. This rejuvenation process can be anything from a paintwork refreshment to a zero hours



Has the company new projects in the pipeline?

We always have several projects in the pipeline - in the aviation sector you cannot afford to sit still.

Currently, we are very excited about transforming diesel-powered GSE into greener vehicles through re-engineering with battery power.

After lengthy research, our design team has come up with a viable solution that means GSE users no longer need to think about investing in new, electric GSE; instead, we can re-equip their diesel units in an extremely cost-effective manner

What does a typical day involve for you in your role as CEO?

There's no typical day for a CEO! Every day usually entails hard work from morning until evening with plenty of travel thrown in for good

> I could be in one of our factories checking on progress; I might be in a board meeting with my team; I could be attending an aviation exhibition of some sort, almost anywhere in the world: I might be visiting a customer to discuss his or her GSE requirements: or I could be waiting for (yet) another

It's consequently a very varied existence but, for Aviaco the company philosophy is very much a mportance to face-to-face

• The very nature of what we do underlines our commitment to the environment.





STEPPING UP FOR BUSINESS

West Africa's strategies to develop a safe, efficient and profitable aviation industry

To find out more please contact Mark Brown: **T**: + 44 (0) 1702 530 000 | **M**: + 44 (0) 7889 100 987 **E:** mark.brown@aviationafrica.aero

www.aviationafrica.aero



