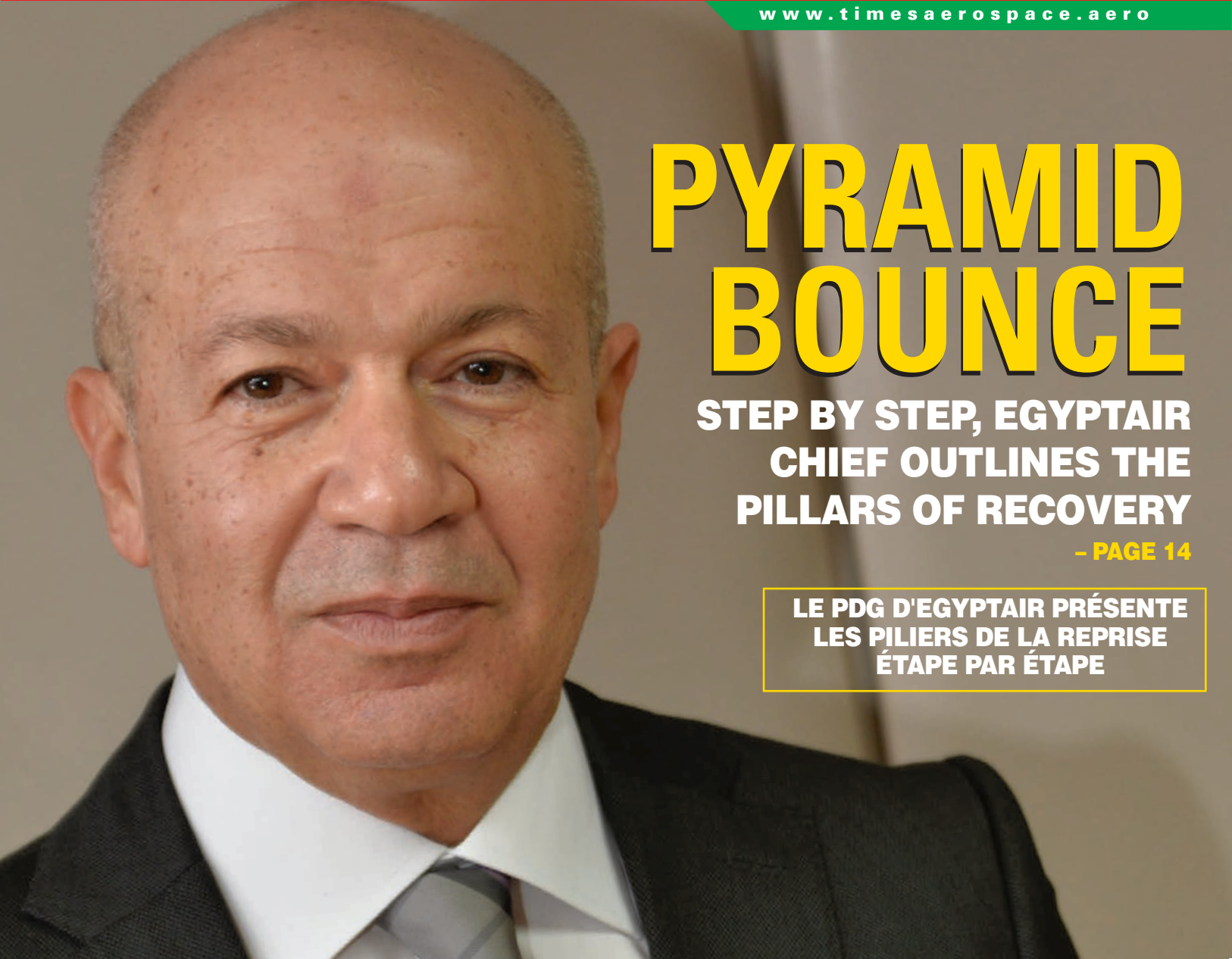




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PYRAMID BOUNCE

STEP BY STEP, EGYPTAIR
CHIEF OUTLINES THE
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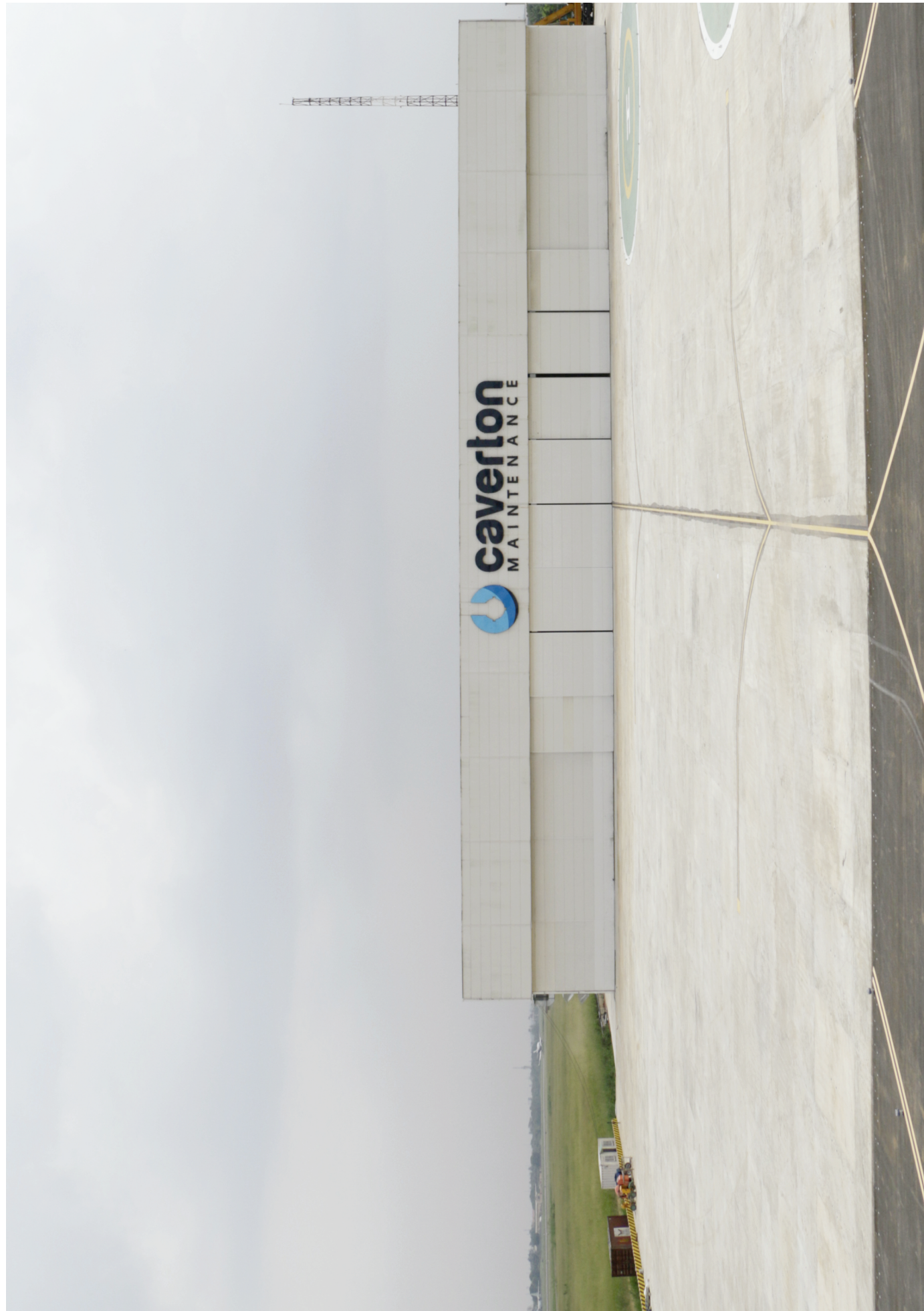


SUSTAINABILITY

Why Africa
trails in
the SAF
evolution

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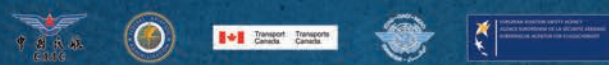
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COVER:
Egyptair chief Yehia Zakaria on the supply chain challenges.
PICTURE: EGYPTAIR

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Pull together to help the *Focus Africa* initiative deliver on promise

One can sense that IATA – the international association of airlines is losing its patience with Africa. The continent’s air travel is expected to be fully recovered in 2024 and already at 93% or pre pandemic numbers while air cargo is 31.4% over 2019 levels.

But despite that positive outlook, the harsh reality is that just 2.1% of global air transport activities come from Africa and IATA estimates further losses of \$213 million in 2023 in the region.

In response to the many challenges, IATA launched Focus Africa – a new initiative aimed at closing that gap and addressing six key areas: safety, infrastructure, connectivity, finance and distribution, sustainability and future skills.

This is not just an IATA initiative. It is a whole industry one. Already the airline group has facilitated gatherings including AFCAC, DGs of civil aviation and airports to try and encourage governments to follow promises with action.

Today the industry is estimated to support about \$63 billion in economic activity and about 7.7 million jobs – IATA’s Africa chief, Kamil Al Awadhi says that could triple in the next two decades, but barriers keep being put up.

Infrastructure constraints, high costs, lack of connectivity, regulatory impediments, slow adoption of global standards and skills shortages are among other factors hampering Africa’s potential.

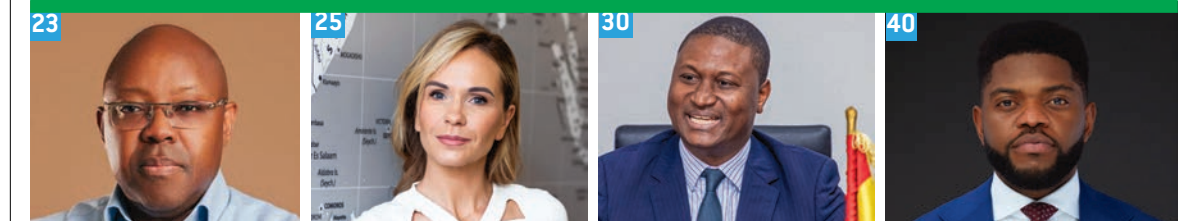
We are seeing some thinking of short-term greed rather than the future. In South Africa, airports want a 38% charges increase, only to be outdone by their ATC demands for a 63% hike.

African governments are holding onto funds paid by passengers for foreign airline tickets in their countries. The figure is well over a billion dollars with Nigeria, Ethiopia and Algeria the biggest culprits. Emirates has already stopped flying to Nigeria – others could also soon cut off connections, thus damaging inbound investment and tourist dollars. Ethiopia could see a backlash that could severely affect their national carrier, an organisation that represents 20% of the country’s GDP. It is theft and is further damaging an industry that already operates on thin margins.

African countries need to wake up and smell the coffee. The impressive Yvonne Makolo, CEO of Rwandair and the current chair of the IATA board of governors summed it up nicely: “Many, but not all the challenges facing Africa’s air transport industry are uniquely African and require African solutions and remedie. Lessons should be learnt from other regions that faced and overcame similar challenges. The best way to tackle the issues is through a partnership, including industry and all its stakeholders.”

Let’s crack on.

Alan Peaford, Editor-in-Chief



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IMAGE: BILLYPIX

Ethiopian chairman in shock departure

Girma Wake - recognised as the "father of the African aviation industry" stood down from his position as Ethiopian Airlines board chair in June.

The reasons behind the shock departure have not yet been revealed as *African Aerospace* went to press.

Ato Girma Wake joined the Ethiopian Airlines board in 2018 and became board chairman in April 2022 when Mesfin Tasew was appointed as group CEO of Ethiopian Airlines replacing Tewolde Gebremariam.

Wake has been credited with being the driver that put Ethiopian on the path to become the continent's largest carrier and a group that competes with major airlines around the world.

He served as CEO of Ethiopian Airlines from 2004 to January 2011. In total he served the airline for more than 30 years. Wake also served as the board chairman of Rwanda Air and adviser to the Minister of Transport in Rwanda.



IBA predicts continued African growth

IBA predicts the African market will continue to see some growth. It expects airline capacity to trend at 110% of 2019 available seat kilometres (ASKs) by Q3 2023.

Capacity recovery within Africa reached 103% of 2019 ASK levels in April 2023, compared to the global average of 95%. This makes the region the third to surpass pre-pandemic capacity levels this year behind Latin America and North America.

The African airlines with the highest seat capacity in Q2 2023 are led by Ethiopian with 12,664m ASKs - an increase of 61% on the previous year, followed by Egyptair with 4,749m ASKs - up 23%, and then Royal Air Maroc with 3,513m ASKs - up 28% compared to 2022.

Online platform

The African Airlines Association (AFRAA) has signed a sales promotion agreement with AviaPro

Consulting. The agreement recognises AFRAA as AviaPro Consulting's representative to promote the use of AviAnalysis to its members and other industry stakeholders in Africa.

AviAnalysis is a new online platform designed to meet the increased demand for quick and affordable access to customised aviation analysis that eliminates the need for the traditional time-consuming service agreements and contractual discussions.

Electric dreams

Slovenian-based electric aircraft manufacturer Pipistrel, now part of Textron, has appointed Absolute Aviation in South Africa, as its distributor to 11 countries across southern and central Africa.

Lanseria airport-based Absolute will take on responsibility for sales, service support and training for Pipistrel's ultralight, light sport and type certified aircraft, including Alpha Trainer, Velis Electro, Explorer and Panthera.



IMAGE: AfBAA

AfBAA celebrates Pereira as first female chair

Alcinda Pereira, co-founder of Angola's successful Bestfly, has been named as Chair of the African Business Aviation Association (AfBAA) - becoming the first female to take that role in the association's history.

Outgoing chair, Nick Fadugba said he was pleased to handover to a strong leadership team "which should drive the Association to greater heights," he said.

Pereira brings with her extensive experience as a co-founder of BestFly Angola, a business aviation operator and ground handling service, together with her international experience from NetJets Europe and EXXON where she worked as chief of department.

Tanzania freighter is Boeing landmark

Air Tanzania received its first 767-300 Freighter in June from Boeing.

The aircraft arrived at the airline's hub in Dar es Salaam and will provide the operator with dedicated air freight capacity to serve the country's growing cargo market. The delivery also marks the first direct 767 Freighter delivery from Boeing to an African carrier.

"The 767 will cater to the growing cargo demand which was previously carried by passenger airplanes," said Ladislaus Matindi, Air Tanzania managing director.

"The 767 will enable Air Tanzania to support a journey towards a more sustainable future and time critical cargo schedules across Africa and beyond. The arrival of the aircraft will open opportunities for global businesses to transport commercial cargo goods to various parts of the world, which will boost national economic growth."

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IMAGE: KENYA AIRWAYS



Sustainable long-haul first for Kenya Airways

In May, Kenya Airways became the first African airline to fly possibly the most sustainable commercial long-haul flight from Africa to Europe flying a Boeing B787-8 Dreamliner for the return flight between Nairobi and Amsterdam.

The flight was part of the Sustainable Flight Challenge between SkyTeam member airlines which bring together 22 airlines for a friendly competition to achieve the most sustainable flight possible.

Apart from use of SAF, the preparations for the flight were done to ensure that it was as sustainable as possible, including route planning, onboard meals and its packaging, transportation of guests and crew, and gifts were all sustainably prepared.

Group CEO Allan Kilavuka: "We are focusing on helping to decarbonise the aerospace through fleet types that have the least amount of carbon emission, reducing our fuel burn through routing, managing our waste through recycling, and deploying the use of solar and SAF as alternative energy."

PICTURE: BELL TEXTRON

Wi-fly boost for Ethiopian passengers

Ethiopian Airlines will offer advanced, high-speed inflight broadband to passengers onboard its upcoming Airbus A350-1000 aircraft.

The airline will install GX Aviation provided by Inmarsat, recently acquired by Viasat, and selected through the Airbus Airspace Link HBCplus programme.

As one of the launching airlines for inflight connectivity (IFC) through Airbus' HBCplus programme, Ethiopian Airlines will benefit from a more streamlined, efficient order process that will ensure its latest aircraft meet the rapidly growing passenger demand to stay connected while flying.

The first of Ethiopian Airlines' Airbus A350-1000 aircraft is set to be delivered in 2024, with passengers able to benefit from GX Aviation's world-class connectivity technology.

Ethiopian Airlines Group CEO Mesfin Tassew said: "Connectivity is a crucial part of our services and products; and bringing Inmarsat's best-in-class GX Aviation service to our passengers, as part of

Airbus' HBCplus programme, is a major step forward."

Flight safety boost in Zambia

Sustainability and safety have come together thanks to the AviAssist Foundation to improve flight safety in Zambia.

The Foundation, Air Traffic Control the Netherlands and the Zambia Airports Company (ZACL), worked together to not only to improve flight safety in Zambia, but also to ensure re-use of high-quality materials rather than discarding. This was done with a donation of 12 non-directional beacons to ZACL.

"It was the commitment of the LVNL in ensuring that the shipment of functioning beacons included the maintenance logs, manuals and spare parts that led us to support the re-use of these beacons" said AviAssist director Tom Kok.

Egypt training

EgyptAir Training Academy has succeeded in renewing the EASA approval for its Airbus A220-300, A320-200, A330-200, A340-300 simulators. The A330-200

renewal is the first after adding the full stall, icing & UPRT features to comply with the latest local and international legislations related to simulators & pilots training.

The A220-300 is the latest simulator obtained by the academy.

Interline agreement

Kenya Airways and China Southern Airlines have renewed their interline agreement following the return of international travel to/from China.

The agreement will assist in restoring connectivity for both airlines' passengers to points on the respective carriers' networks via Nairobi, Guangzhou and Shanghai using a single ticket and one baggage policy.

AFRAA sets AGA date

The 55th African Airlines Association (AFRAA) Annual General Assembly (AGA) is to be held from 19-21 November 2023 at the Speke Resort in Entebbe, Uganda – The Pearl of Africa.

The AGA will be hosted by Uganda Airlines under the patronage of the Government of Uganda.



Poppy Khoza wins IATA Role Model award

Poppy Khoza, Director of Civil Aviation, South African Civil Aviation Authority (SACAA), won the Inspirational Role Model award at the IATA Diversity & Inclusion Awards during the IATA AGM in Istanbul in June.

Willie Walsh, IATA's director general said: "I congratulate the winners of the 2023 awards. By their example, they are leading the way to a gender balanced aviation industry. They have pushed boundaries to demonstrate that diversity and inclusion is fundamental to business success. Women are still under-represented in aviation, but with the help and example of these and previous award winners, we are making progress."

Other awards went to: High Flyer: Camila Turrieta – Chair of the Diversity, Equity, Belonging, and Inclusion Committee, Air Line Pilots Association (ALPA), and First Officer, JetBlue Airways; Diversity & Inclusion Team: Virgin Atlantic Airways



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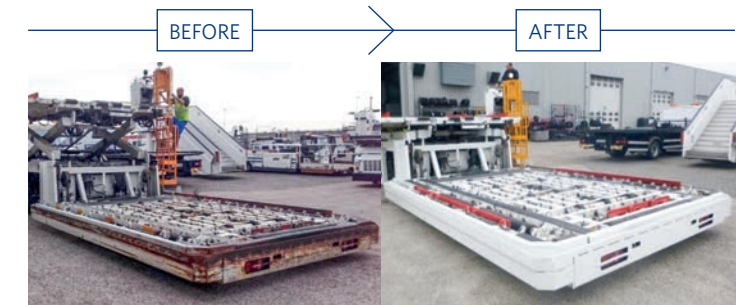
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Simplified border controls

Namibia and Botswana have simplified their mutual border controls.

Citizens of both nations now enjoy the convenience of crossing the border with just their ID cards, rendering the once mandatory passports and stamps obsolete for this purpose.

To enable this simplification, the two countries aligned their systems and documents with the help of Veridos' solutions. A QR code and a machine-readable zone were added to Namibia's ID cards, while Botswana's border control system was adapted to read these ID cards without any problems.

TAP switched on in Luanda

TAP has launched direct flights to Luanda from Porto, starting the airline's second service to the capital of Angola. biggest city will connect the two destinations, with a twice a week service via TAP's fleet of next generation Airbus A330neos.

Ricardo Dinis, TAP Air Portugal country manager for UK, said: "We have flown to Luanda from Lisbon since 1957 and have seen the potential for greater opportunities in this market so we know



Vince Goncalves: "We have been supporting Embraer business jets for many years."
IMAGE: EXECUJET MRO SERVICES

ExecuJet seals Embraer MRO deal

ExecuJet MRO Services has been appointed by Embraer as its authorised service centre (ASC) for business jets in Africa.

ExecuJet, based at South Africa's Lanseria International Airport near Johannesburg, has been operating in Africa for more than 30 years and is the leading business aviation maintenance, repair, and overhaul (MRO) organisation in the region.

Vince Goncalves, Regional Vice President Africa at ExecuJet MRO Services, said: "We have been supporting Embraer business jets for many years and have a long and trusted relationship with the aircraft manufacturer."

ExecuJet is already locally and internationally certified to do line and heavy maintenance on Embraer Legacy 600 and 650 business jets.

customers will welcome the launch of our new twice-weekly service from Porto."

Tekever to monitor Nigeria oil and gas

Tekever has been chosen by Nigerian UAS operator Aerial Robotix for environmental monitoring of oil and gas infrastructure in Nigeria.

The AR3 carries out 6-hour flight missions six days a week at distances of up to

85km from the ground station and provides live feedback imagery through its Atlas software direct to the client over an area of more than 30,000km².

Airlink picks Lufthansa Systems

Airlink has selected Lufthansa Systems' flight operations products Lido Flight 4D, Lido mPilot and Lido Airport Obstacle Data

Service (AOODS).

With Lido Flight 4D, a highly effective, interactive flight planning solution, Airlink will optimise its routes by taking current flight-related data into account, such as fuel consumption, costs and flying time.

India connection

Indian low-cost carrier IndiGo will connect Nairobi, Kenya with direct flights from Mumbai by

early August.

Pieter Elbers, CEO, IndiGo said: "As we steadfastly execute our strategy 'Towards New Heights and Across New Frontiers', we are poised to establish unparalleled connections between people and places.

Along with other new global routes, we are excited to expand our footprint in Africa."

Air Algérie adds eight jets to Airbus fleet

Boeing and Air Algérie confirmed an order for eight 737-9 jets at the Paris Air Show in June. The Algerian flag carrier also signed an MoU for two 737-800 Boeing Converted Freighters (BCF) to meet increasing cargo demand in the region.

Yacine Benslimane, general manager of Air Algérie said: "This acquisition is part of Air Algérie's fleet extension strategy through the purchase of new aircraft."

Earlier in June, the carrier signed a firm order for seven widebody Airbus aircraft to support its commercial development. By operating the A330neo alongside the A350-1000, Air Algérie will benefit from operational savings such as a 25 percent lower fuel burn per seat.



IMAGE: AIRBUS



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Aviation Africa's two-day summit visits West Africa for the first time and will be hosted by the Nigerian Civil Aviation Authority. By touring the event around the African continent, it can better serve the African countries' different requirements for open skies and growth.

How African aviation can take the next steps to realise potential

It is practically a given that Africa's aviation industry offers the greatest potential of any geographic sector in the world.

IATA projects passenger numbers will double by 2040 - but will African carriers be ready to play their part? Will governments support the infrastructure and the trading environment to change the current situation where Africa accounts for 18% of the global population but provides just over 2% of the global air transport market.

West Africa highlights the challenge. Africa's largest populated country Nigeria is estimated to be the third biggest in the world - but is only now taking steps for a national carrier. Along the coast of western Africa, nations are developing airlines and airports in a rush to capture market opportunities.

But without the right building blocks in place - will it work?

Bringing the Aviation Africa Summit and Exhibition to West Africa for the first time is perfect timing to witness the renaissance of the industry. It takes place in Abuja, Nigeria on September 13-14.



Aviation Africa will bring together airlines, airports, regulators, manufacturers, suppliers, financiers and media for the continent's largest showcase and meeting point.

On the main plenary stage, keynote speakers from organisations such as IATA, AFCAC, ICAO and AFRAA will set out the key areas of concern, delegates will hear from key players in the industry such as Ato Girma Wake, who until recently was chair of Ethiopian and advised governments such as Togo and Rwanda in shaping their aviation business.

Invited speakers include Rwandair CEO and chair of IATA's governing body Yvonne Makolo; and Sanjeev Ghadia CEO of Africa's largest cargo airline, Astral in Kenya.

C-suite management from airlines across eastern, southern, and central Africa will take to the stage to share thoughts and anecdotes about the challenges ahead, alongside the secretary general of AFRAA Abderahmane Berthé and IATA's regional VP for Africa Kamil Al Awadhi

The regulators - who many believe hold the key to the continent's future - will also be there in numbers, and on stage Directors general of civil aviation authorities from across the continent will join AFCAC secretary general Adefunke Adeyemi to identify barriers.

The CEO of the new Nigerian flag carrier Nigeria Air, Capt Dapo Olumide, will talk about the airline's future strategy; while sustainability takes centre stage as Africa looks at realising a potential to become the world's leading producer of sustainable aviation fuel (SAF). How that happens will



SUMMIT HOSTS: Nigeria Air chief executive Capt. Dapo Olumide flanked by Times Aerospace managing director Mark Brown (right) and summit chairman Alan Peaford, discuss the programme ahead of September's Aviation Africa Summit and Exhibition in Abuja.
PICTURE: NCAA

Below: Speakers include Yvonne Makolo and Sanjeev Ghadia.



become clear with an anticipated announcement of SAF production developments to start on the continent.

Infrastructure is another challenge being discussed as airport chiefs and providers share their vision

Issues like safety, diversity, training and future workforce skill development all come under the microscope.

There will be the first time deep dives into three key industry sectors as special symposia will focus on aviation finance, business aviation and the whole maintenance, repair and overhaul (MRO) industry with expert speakers from around the world coming together.



Separate sessions will look at the issue of future workforce and safety - issues that have dogged Africa's potential for decades.

The Summit - and the exhibition with more than 100 companies including some of aerospace world's largest manufacturers and suppliers - is fully supported by the Nigerian government and hosted by the Nigerian Civil Aviation Authority.

The hosts will be supplying secure transport from the approved conference hotel to the International Convention Centre where the summit and exhibition take place. Support with visa documentation is also being coordinated by NCAA and the Ministry of Aviation for delegates once they are registered.

Registration and other information can be found at www.aviationafrica.aero.



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YEHIA ZAKARIA



BUOY ZONE

Egyptair is focusing on restoring its operational capacity efficiently, as well as expanding its fleet and network. Yehia Zakaria, Chairman and CEO of Egyptair Holding Company, tells Anuradha Deenapanray Chappard why the group is looking for complete solutions to counter the post-pandemic supply chain problems.

Egyptair group is bouncing back and returning to growth, buoyed by good indicators. It announced a profit of more than \$31 million for the first half of fiscal year 2022-23.

"Egyptair did not lay off any workers or members of its teams during the pandemic. We have been focusing on restoring our operation very fast and efficiently. We are recovering with a focus on the serviceability and availability of our aircraft as well as the expansion of our network", said Engineer Zakaria who has been piloting one of the largest aviation groups in Africa since October 2022.

Like other airlines, Egyptair is also facing aircraft availability issues while manufacturers are battling to keep production lines going. Suppliers are urging clients to place early orders as the systemic problem in part shortages persists.

Egyptair has a well-defined fleet expansion and improvement strategy to support its route development plan. The airline's ambition is to bring to 96 the number of destinations, including Europe and Latin America (Brazil and Argentina in partnership with tour operator Master Flights), against 72 today. The New York route will also be enhanced.



Two B787 Dreamliners will join the national carrier's fleet by end-2023.

Last February, the airline became the first African operator of the A321neo out of the seven aircraft ordered. This acquisition will enable Egyptair to enhance its efficiency, reduce operating costs, meet its commitment to

sustainability and face competition, while fueling its expansion plan.

"We have published a Request for Proposal (RFP) for ten widebodies. We are also negotiating to acquire narrowbodies according to availability. We are looking for permanent solutions regarding plane acquisition and engineering as there are supply chain problems. We have to make fast decisions. Time is a very critical issue", added Zakaria.

Egyptair has a very ambitious plan to expand its routes including Manchester in July 2023. It resumed flights to China (Beijing /Guangzhou and Hangzhou) after a 3-year hiatus.

"There is a lot of potential in China as the country is getting back. We are thinking about Shanghai. As for India, we already fly to Mumbai, we will now add Delhi to our network."

foreseeing added value through this contract. It also signed a partnership contract with Jordan's Petra Aerospace in the field of repair and overhaul of CFM56-3 engines. According to Eng. Walid El-Khafif, Chairman and CEO of Egyptair Maintenance & Engineering, "the partnership includes marketing of the capabilities of the engine workshop to attract more customers in Africa, Asia and Eastern Europe".

Egyptair Training Academy seeks to maintain its leadership in training with the highest international standards in the aviation industry. It is improving its training programme by integrating new technologies into its full set of training simulators – the Academy is the first African training body to launch a simulator for the latest Airbus A320neo aircraft.

It offers modern and diverse training programmes for pilots on A320, A320neo, A220-300, A330, A340 and Boeing B737-800, B777 simulators and advanced training devices for cabin crews like the Cabin Emergency Evacuation Trainer (CEET) and the Cabin Service Trainer (CST) (CST) as well as the EASA 147 approval for technical training.



Egyptair Training Academy has successfully passed the EASA recurrent qualification for the full flight simulators: A320 (neo /ceo), B737-800, B777-200ER.

It has also obtained approval for updating the A330-200 simulator to comply with the latest EASA regulation CS-FSTD (A) Issue 2 and ECAR 121.

EgyptAir Training Academy has a partnership with the United Nations World Food Programme (WFP) since November 2022.

The Academy is now targeting more pilots from African, Arab, European as well as Indian airlines. It is ready to cater for training and upskilling needs of the transport sector.

To be noted that Egyptair intends increasing its cargo capacity to take full advantage of its geographic location, not far from the junction between Africa and the Middle East.

Egyptair Cargo introduced a converted freighter of type B737-800SF to its current fleet of 3 A330-200P2F. This added capacity of 21 tons per sector for the narrow body and 55 tons for the wide body freighters will cater for the market needs and enhance the company's competitive advantage. 2 more A330-200P2F will be introduced by the first quarter of 2026 for additional freighter capacity.

Despite significant headwinds during recent years, Egyptair will not be privatised, Yehia Zakaria recently told CNN. "Egyptair is the flag carrier and the only bird carrying the flag of Egypt all over the world," Zakaria said. He underlined that the airline "is not for sale".

Egyptair seems to be on the right track to cut losses stemming from the effects of the pandemic and return to profitability. ▲

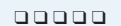
SOMMAIRE

UNE REPRISE RAPIDE ET EFFICACE POUR EGYPTAIR

Egyptair se concentre sur le rétablissement efficace de sa capacité opérationnelle et sur l'expansion de sa flotte et de son réseau. Le groupe rebondit et renoue avec la croissance. Il a annoncé un bénéfice de plus de 31 millions de dollars pour le premier semestre de l'exercice financier 2022-23.

Yehia Zakaria, président-directeur général d'Egyptair Holding Company, a déclaré à African Aerospace que le groupe recherche des solutions permanentes en matière d'acquisition d'avions et d'ingénierie pour contrer les problèmes de la chaîne d'approvisionnement.

« Egyptair n'a licencié aucun employé ou membre de son effectif pendant la pandémie. Nous avons repris nos opérations rapidement et efficacement. Nous nous redressons en mettant l'accent sur la viabilité et la disponibilité de nos avions ainsi que sur l'expansion de notre réseau », affirme Yehia Zakaria qui pilote l'un des plus grands groupes aéronautiques d'Afrique depuis octobre 2022.



Egyptair a une stratégie d'expansion et d'amélioration de sa flotte bien définie pour soutenir le développement de son réseau. L'ambition de la compagnie aérienne est de porter à 96 le nombre de destinations, dont l'Europe et l'Amérique latine (Brésil et Argentine en partenariat avec le voyageur Master Flights), contre 72 aujourd'hui. La desserte de New York sera également renforcée.

Deux B787 Dreamliners rejoindront sa flotte d'ici fin 2023. En février dernier, la compagnie aérienne est devenue le premier opérateur africain de l'A321neo sur les sept commandés. Cette acquisition permettra au transporteur national d'améliorer son efficacité, de réduire ses coûts d'exploitation, de respecter son engagement de durabilité et de faire face à la concurrence.

La compagnie exploite déjà 12 A220, 8 A320neo, 1 A320ceo, 4 A330-200, 4 A330-300, 29 B737-800, 6 B777-300 et 6 B787-9.

La compagnie souhaite acquérir dix gros-porteurs et des monocouloirs, en fonction des disponibilités.

Egyptair a repris ses vols vers la Chine (Pékin/Guangzhou et Hangzhou) après trois ans d'interruption. La Chine représente beaucoup de potentiel. La compagnie étudie une liaison avec Shanghai. Quant à l'Inde, elle va ajouter Delhi à son réseau après Mumbai.

Par ailleurs, Egyptair compte consolider ses capacités de fret, de formation et de MRO à travers la Egyptair Maintenance & Engineering.

How Rodger fosters a balancing act...

Guy Leitch asks Airlink CEO Rodger Foster how Airlink rebounded so strongly after Covid and what his plans and constraints to growth are.

From its small beginning as a fully privately-funded airline, Airlink is now, by number of flights, the second largest airline in Africa. To have grown so fast is an incredible accomplishment as CEO Rodger Foster acknowledges. But, he says, there is a lot more to it than the numbers.

“Size is not important to us,” he said. “Our focus is on growing responsibly and sustainably. We aim to be the best that we can be, and not necessarily the biggest. Thus we are proud to be consistently Africa’s number one airline in terms of on-time performance. This is typical of the inherent quality that we aim for, rather than outright size.”

One of your core values of Airlink is to be conservative with the balance sheet. And I asked Foster if this was why he had not been tempted to acquire latest generation aircraft such as the Embraer E-Jet E2?

“The utilisation required to justify the high ownership cost of new aircraft is not attractive,” he said. “We find we can get first generation E-Jets, some as young as 5 years, at prices that do not strain our balance sheet.”

So what is the biggest single constraint to growth?

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Foster said: “We have to re-establish equity as our post-Covid balance sheet is a constraint. As a business you can have agility and vision, and expand your horizons and increase your footprint, but you can’t do any of those without equity. If you want to raise debt, then you have to keep your debt-equity ratio within your financial covenant terms. So, in the short term, the big constraint is going to be the balance sheet.”

Airlink emerged from the Covid pandemic and the SAA de-link in good shape, despite the hole caused by R890 million in tickets revenue not paid to it by SAA.

“The key is that we are agile,” Foster said. “We took stock of the pandemic, which we recognised as a dynamic uncertainty. We had to think on our feet, constantly adapting. We had to take advantage of every opportunity that we could,



ILLUSTRATION: ALASHI, ISTOCK

and we had to do it all well. We had to go back to basics and rebuild the business from first origins.

Around the world regional airlines are battling with pilot loss to the larger airlines, and globally many airlines are battling with staff shortages across the business. Airlink has not escaped this.

“We are finding that there are increasingly alluring approaches to recruit our pilots (including Australian citizenship offers!), so we are having to enforce our training bond contracts. For our non-pilot staff, during Covid the most important element of our survival strategy was that we took care of our people in whichever way we possibly could. Fortunately, we were able to retain all our staff.

Airlink has now added the Nairobi-Johannesburg pairing. It is now an established regional network carrier with strong feeds from its own network as well as its partner airlines. I asked Foster how he manages the sometimes conflicting demands of the airline partners and foreign regulators in this rapid post-Covid expansion?

“We restored our network route by route. We worked with the regulators and the authorities in

neighbouring countries and we were able to quickly mobilise air access as it became available through easing of the lock-down.

“And let’s not forget that the industry had its problems before Covid. Arguably, there was too much capacity. The fares that had been achieved before Covid were not adequate to cover even the direct variable costs across the industry. What Covid did is it created a watershed that separated the survivors from those who didn’t.”

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Foster is also looking at further expansion through Africa.

“We have been awarded additional traffic rights which we applied for as long ago as September 2020. We also have air traffic rights which we haven’t yet used which we have had for quite some time, and we will be exploring those traffic rights imminently,” he said.

Airlink has also recovered its rights to operate to Madagascar after a three year suspension of air services between Madagascar and South Africa. “We have been in continual

engagement with all the key role-players, especially those in Madagascar, such as their CAA and Department of Transport,” Foster said. “What I think finally persuaded the Madagascans was that the Madagascar Tourist Authority found that inbound tourists for December 2022 were at just 60% of 2019 levels – despite a much stronger world-wide recovery. They realised that the loss of air access between South Africa and Madagascar was having a direct negative impact on their all-important tourism revenue.”

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Expansion costs money and with banks even more cautious of airlines Foster explained how Airlink had financed growth.

“We have never had a shortage of cash because of what we did with our austerity plan, and we have been able to use that cash wisely, as best we could in rebuilding the business. Right now our monthly revenue streams are at



Rodger Foster: Delivering growth and within budget. PICTURE: AIRLINK

approximately 190% of where we were pre-Covid. Although we have added capacity back into the system, we haven’t added it irresponsibly. We added capacity as the market demands and so have created a better balance between supply and demand than what there was pre-Covid.

Moving to the fleet plans – a Boeing 737-300 in Airlink livery has tongues wagging – but will Airlink be moving up to narrowbodies?

“The Boeing 737 is a short term ACMI ‘wet’ lease. When we renewed the lease we got them to change the livery. Regarding up-gauging: the first step is our Embraer 195 initiative.

“The EMB195 has more or less the same operating costs as a 190 on a trip cost basis. But when you divide the number of seats into the costs, the 195 gives slightly better operating economics. However, we are naturally not quite on par with the low-cost carriers as regards unit cost, so eventually we will have to up-gauge. This is very much part of our long-term network and fleet plans.”



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Guy Leitch puts questions on recovery, funding and long haul prospects to South African Airways (SAA) interim CEO Professor John Lamola.

Lamola faces up to the SAA challenge

GL: The deal to sell a majority shareholding in SAA to a strategic equity partner, the Takatso Consortium, which will inject R3 billion in operating capital, has been long delayed.

JL: Yes, but the Competition Commission has now given the go-ahead so we are hopeful the process is reaching a conclusion.

In the meanwhile, in terms of operating capital, we have done far more than was expected and the airline is self-sustaining, partially since we went on an aggressive drive to mobilise 'lazy cash' within the business.

This included the blocked funds held in countries like Angola, Zimbabwe and Burundi.

There was more than a R1 billion due to us, and we have got in more than half of that so far.

GL: So is SAA now finally trading profitably?

JL: We have a positive cash flow. We have an average load factor of between 70 and 80%.

When SAA came out of business rescue, the business plan provided for R2 billion worth of working capital.

We have been flying since September 2021 so

if we were losing money we could not have run since then on just R2 billion.

GL: While SAA was grounded by Covid and Business Rescue, your competitors ate your lunch – particularly on the regional and long-haul routes. Is there still any market left for you?

JL: The market has changed drastically over the past three years and right now a return to long-haul may be risky. However, we will be restarting long-haul operations in the second half of 2023 with our first carefully selected route, which we will announce soon.

GL: You currently only have two widebody long-haul aircraft left, an A340-300, and an A330-300. Is that sufficient to resume long-haul flying?

JL: We may also get an A350-900, depending on which long-haul route we choose to operate, as Johannesburg-Perth will require an A350. Six new aircraft have been approved by government for delivery and there is currently a Request for

Proposals out for four A320s. These will all be deployed by September 2023. We expect at least one of the six new aircraft to be a wide body.

GL: Do you have a clear fleet renewal strategy?

JL: Our plan in 2023 is to quickly ramp up to a total of 12 aircraft, being 9 x A320s and 3 x A330s. We prefer existing fleet extension rather than purchasing new aircraft. When needed, new aircraft acquisition will be determined by how the deal with the Takatso Consortium concludes, as that transaction has a very robust business plan. If the transaction gets delayed beyond which we as the board of SAA believe is healthy, then we will start implementing that business plan ourselves.

GL: You have been good at getting the A320s that were returned to the lessors back, with their original SAA liveries and seating configurations intact. Are the aircraft lessors still keen on SAA business?

JL: The lessors may have been prejudiced in our

business recovery process, but we are not going to them cap in hand.

The lessors are approaching us to do business.

GL: And finally, as the 'flag carrier' you still have to fulfil a political development agenda. How do you balance that with the commercial imperative of being sustainable – if not profitable?

JL: The two goals are not inseparable. SAA is a seedbed for those who would never otherwise have had a chance to become pilots or aviation managers.

Of course, this comes with a price in that a lot of taxpayers' money has had to be put into sustaining SAA.

However, we are now in a different phase and we have learned much from the past. The challenge is to balance the political and the commercial.

The key thing is that there has been a major mind shift from the past to the current management of SAA.



Professor John Lamola: We prefer existing fleet extension rather than purchasing new aircraft. IMAGE: ROBIN RABEC.

KINGDOM COMES TO THE AIRLINE TABLE

Eswatini has ended more than two decades without a national carrier with a new airline beginning operation.

Alan Dron reports.

The southern African kingdom of Eswatini has its own national airline once again, with the launch of services to destinations in South Africa and Zimbabwe.

The first service, to Johannesburg, took off on March 26, more than 20 years after the country's previous flag-carrier, Royal Swazi National Airways, ceased operations. Until summer 2022, the country's air services were operated by South African regional airline, Airlink.

The inaugural services – Johannesburg was followed by Harare on April 14 and Cape Town and Durban should have started by the time this article appears – are being operated with two Embraer 145 regional jets.

The Johannesburg and Harare services carry a mix of business leisure and VFR (visiting friends and relatives) traffic, but Cape Town will be predominantly leisure, said the company's director, commercial, Xavier Masule.

Traditionally, new services take some time to become established and Eswatini Air's routes are no different: "As expected, the load factors are



The inaugural Sikhuphe to Johannesburg flight gets the traditional water arch salute on landing. PICTURE: ESWATINI AIR

low. It's a new service and people have to get used to it," he said.

"But the loads are increasing on a week-by-week basis. It's very positive. Some flights are doing far better than expected. Feedback has been overwhelmingly positive."

Sectors are short: King Mswati III International Airport, Sikhuphe to Johannesburg is around one hour, Sikhuphe to Harare, 1.5 hours.

One factor in Eswatini Air's favour is that, while it faces competition from Airlink on the Johannesburg sector it is currently the sole operator on the Harare run.

A further advantage is that the route to the

Zimbabwean capital is non-stop; previously, passengers had to make a connection in Johannesburg. Cutting out a stop in Johannesburg also applies to the Durban and Cape Town routes, which is likely to be attractive to passengers. "The market has been crying out for this service," Masule said.

Eswatini Air plans to serve Johannesburg twice daily. Durban will be daily, with Harare four-times weekly and Cape Town, three times a week.

At present, the two Embraer 145s are considered adequate for the initial services: "it's only when the market picks up and we add frequencies and other destinations that we will look at growing the fleet," said Masule.

NAMIBIA HOPEFUL FOR NEW REGIONAL CHALLENGER



FlyNamibia raised objections to a competitor but has now withdrawn the complaint. PICTURE: FLYNAMIBIA

Prospective airline, Fly Etosha, founded by Captain William Ekanjjo, formerly of now-defunct national airline Air Namibia, said in April that it planned to be operational by June – although anyone who has ever tried to set up an airline will tell you that those timetables usually slip.

Nevertheless, Fly Etosha wants to be in a position to compete with Namibia's current de facto national airline, FlyNamibia, sooner rather than later. Etosha is the name of a Namibian game park.

FlyNamibia apparently perceived the upstart as a threat, as it lodged a lengthy complaint about Fly Etosha in February with the country's Transportation Commission, expressing concerns about the newcomer's capabilities and finances.

"As Namibia's first privately-owned scheduled

passenger airline, FlyNamibia's chief concerns are directed towards quality services and, above all, passenger safety," it said. "The application, as it currently stands, has raised serious concerns as to the planned airline's ability to ensure the safety of passengers.

"FlyNamibia rejects any claims... that the airline has launched this objection to deter another airline from starting operations and thus discouraging competition."

However, within days, a public backlash forced the de facto national carrier to withdraw its objections.

Ekanjjo said in May that his new airline planned to start operations within months. However, his company does not yet have an air service licence or AOC.

In a series of interviews with Namibian media outlets

Ekanjjo outlined his plans to operate to several domestic destinations, as well as to South Africa and Zimbabwe. He told local publication *Business Express* that he did not regard his planned company as a rival to FlyNamibia, but as a way to grow the country's aviation sector.

Business Express said that the start-up would "seek to invest" in a heterogeneous fleet of 21 aircraft, ranging from Cessna Grand Caravans up to ATR 72s and Fokker 50s.

In television interviews, Ekanjjo said that aircraft of the type required for regional services were readily available and could be bought or leased. He added that the planned airline could be raised without much difficulty and that the airline could begin international services two years after its first flight.

The top air cargo service provider in Africa, Ethiopian Cargo and Logistics Services, is building Africa's largest e-commerce hub at a cost of \$50 million at its facility in Addis Ababa. **Kaleyesus Bekele** reports.



Putting the E in Africa: The e-commerce hub will be equipped with an automated sortation system. PICTURE: ETHIOPIAN CARGO

THE LEADER OF THE e-PACK...

With a floor area of 15,000 sq.m the at Addis Ababa Bole International Airport, the new infrastructure for e-commerce will, upon completion, handle 23 million parcels per annum.

The e-commerce hub will be equipped with an automated sortation system and electronic transport vehicles (ETV) to handle shipments ranging from small parcels to boxes, skids, and buildup units.

The need for specialised global standard e-commerce logistics services came into the picture with the growing of the global e-commerce business, especially after the outbreak of COVID-19. Cognisant to the growing demand for e-commerce services in the wake of the COVID-19 pandemic, Ethiopian started investing on the requirements for a standard e-commerce centre.

According to Abel Alemu, managing director, Ethiopian Cargo and Logistics Services, the e-commerce hub comprises dedicated warehouse facility, and modern IT infrastructure as well as a well-trained workforce.

"The main objective of the e-commerce centre is to be an e-commerce parcel distribution hub and a gateway for Africa. Being strategically located in the horn of Africa with access to the entire continent via our vast network, we also aim to serve the global market through digitalized and innovative solution by availing seamless connectivity," Alemu said.

He claims that the Ethiopian upcoming e-commerce hub is first of its kind in Africa adding that it is the largest e-commerce hub in the continent. "As we all know e-commerce is becoming the new normal trend and growing so fast all around the world including Africa which has the youngest population and high mobile phone penetration which will further expedite the e-commerce penetration in the region," Alemu said.

With more than 60 destinations in Africa Ethiopian Airlines has an extensive network in the continent.

"Ethiopian Airlines having its huge network all over Africa will further complement the e-commerce hub initiative that the continent has to increase its digital trade within the region and with the rest of the world. This will be

done by working closely with 3rd party logistics companies in the market including courier companies, postal operators, integrators, etc. for the required first and last mile logistics service and with different e-commerce startups in the region," Alemu said.

The construction of the e-commerce hub commenced in November 2021. Currently 80% of the work has been accomplished and its completion is slated for November 2023. The total cost of the project is estimated at \$50 million.

The Chinese contractor, China National Aero Technology International Engineering Corporation (AVIC) is undertaking the construction work while a joint venture consulting firm of Dar-Al-Handash (Share and Partners) and BNP Associates Inc is consultant of the project.

Ethiopian Cargo has 15 dedicated cargo aircraft – 4 B737-800F each having 22,500 KG per flight carrying capacity. Ethiopian has converted two of its B767s to cargo each having 50,000 KG per flight capacity. It also has nine B777-200F each carrying 100,000 KG per flight. The airline has five B777Fs on order.

The Ethiopian cargo terminal has the capacity to handle one million tons of cargo per annum.



Ethiopian Airlines Group and DHL Global Forwarding are working as a joint venture for the logistics growth of Ethiopia including the air, road, ocean and sea freight service. Alemu believes that Ethiopia will benefit from this partnership in terms of technology and skill transfer, besides the cooperation results in employment opportunities. DHL will also provide the last mile delivery service to Ethiopian Airlines customers.

Currently, Ethiopian Airlines is in close discussion to extend the partnership further in the e-commerce business.

Ethiopian Airlines has also partnered with postal firm MailAmericas to develop cross-border e-commerce services within Africa and the Middle East using Addis Ababa as a hub. According to the agreement the tie-up will see Ethiopian Airlines offer MailAmericas its air transport services for carrying goods across its network.

As one of the leading global air cargo operators, Ethiopian Cargo and Logistics Services covers more than 130 international destinations around the world with both belly hold capacity and 68 dedicated freighter services. ▲



▼ The main objective of the ecommerce centre is to be an ecommerce parcel distribution hub and a gateway for Africa. ▲
ABEL ALEMU

PICTURE: ETHIOPIAN



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Nigeria's Ibom Air is promising expansion across west and central Africa, as COO George Uriesi outlines to **Chuckwu Emeke**.

The chief operating officer of Nigerian registered Ibom Air, George Uriesi, has said that the airline's business plan is to grow and compete successfully across Africa and therefore, it intends to add regional flights to its current domestic flights.

"We will be venturing into the West and Central African regions in 2023 and will grow from there over the next five years, reaching across the continent. Our vision is to be a world class, African regional airline," he said..

"To achieve this, a lot of things are required. Our own home-base, world-class hub terminal, added to our own world-class maintenance facility, a modern, efficient, world-class fleet. As all these elements come together nicely, we intend to keep pushing on all fronts," said Uriesi, in an exclusive interview.



"We know that to become a proper scheduled carrier, we need to grow," he said. "With a fleet still less than 10 aircraft, we know that we are still largely a 'wannabe' scheduled carrier. But with this small fleet and some very hard work, we have managed to build significant goodwill, besides establishing that we know how to utilise airplanes efficiently and profitably."

Ibom Air, which is owned by Akwa Ibom state government in Nigeria, held inaugural flight in February 2019 and commenced scheduled passenger operations on June 7, that year. It later signed an agreement with Airbus for purchase of 10 A320s and has made a few important interventions in the Nigerian society, under corporate social responsibility,

Uriesi said the airline does not intend to operate in Africa on a point-to-point basis, but would "build necessary partnerships to ensure efficient connectivity for our passengers. We are already in discussions with potential partners in the continent. We have qualified for and await the award of our IOSA certification. We have been building the internal know-how to be able to partner with any world



George Uriesi: "We have become wrestlers, in a continuous battle against this hydra-headed monster called the Nigerian aviation business environment" IMAGE: IBOM AIR

George and the Nigerian dragon

class carrier. As we grow into the region, we will be establishing these key partnerships."

On collaboration with other airlines in Nigeria, Uriesi said: "it is very easy for people who are not involved in the management of airlines in Nigeria to talk about collaboration, alliances, mergers, etc. On a practical level, it isn't anywhere as easy as that. We haven't really reached that level of business stability yet. You would have to have two airlines with similar internal cultures and business philosophies. What we are doing now is taking baby steps towards better cooperation. But intense alliances and even mergers cannot just be wished in by people saying so. A lot is required."

Reflecting on how the airline has fared since close to four years of operations and the improvement opportunities, Uriesi said: "Of course, we see areas of improvement every day. We are never satisfied with our performance. We are too damn hungry for that.



"As a result, we have become wrestlers, in a continuous battle against this hydra-headed monster called the Nigerian aviation business environment. It throws you. You recover. It throws you again. You recover. You get bloodied, but you cannot throw it, until we all come together and tame it at some point in the future. Hence, we had

to learn to wrestle every day to get by. I must say that when you see domestic airlines in Nigeria, clap for them. They are successful wrestlers."

Calling on the federal government of Nigeria to "focus on policies that enable the local industry to

grow, while removing obstacles to the growth and survival of the industry," Uriesi said. "Managing an airline in Nigeria is an endeavor fraught with so many non-airline challenges first of all, before the normal airline challenges that your peers have to face elsewhere, and the normal airline challenges are already very daunting. So, if you're an emerging investor in the airline business in Nigeria, try to do some homework and brace!!! I think this is the least I can say." ▲



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

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

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

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

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



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Le transport aérien de la Grande île a été fortement impacté par la pandémie du Covid-19 avec notamment la liquidation d'Air Madagascar. Le pays a aujourd'hui une nouvelle ambition avec la création d'une nouvelle compagnie nationale. Un reportage d'Anuradha Deenapanray Chappard.

Alefa* Madagascar Airlines

*ALEFA SIGNIFIE « ALLER DE L'AVANT », « ALLEZ !!! » EN MALGACHE

Madagascar Airlines est désormais la compagnie aérienne nationale de Madagascar. Elle a reçu son Certificat de Transport Aérien (CTA) et sa licence d'opérations le 17 avril dernier.

Madagascar Airlines est née de la fusion entre d'Air Madagascar et de Tsadaria. Air Austral et Air Madagascar avaient lancé cette filiale d'air Madagascar dédiée à la desserte du réseau domestique de la grande île, en 2018, dans le cadre de leur partenariat stratégique à l'époque. Ses six ATR 72 desservent également des lignes régionales (La Réunion, Mayotte, Comores et l'île Maurice). Madagascar Airlines exploite en location-gérance plusieurs routes de la défunte Air Madagascar.



C'est Thierry de Bailleul qui a pris la tête de Madagascar Airlines en décembre 2022. Muni d'une longue expérience dans le transport aérien, il a notamment été directeur régional chez Air France-KLM, DG France chez Emirates et directeur des ventes Europe chez Qatar Airways.

Le conseil d'administration et le nouveau DG peuvent exploiter désormais les lignes régionales et européennes du pavillon national. Ils souhaitent créer une compagnie rentable et capable de financer seule son avenir d'ici trois ans. Thierry de Bailleul a également annoncé à la presse la signature d'un accord pour l'acquisition de trois Embraer 190-E2 dont le premier est attendu mi-2023. Il étudie



L'équipe d'Embraer avec le président malgache Andry Rajoelina. PICTURE: EMBRAER

également un certain nombre de solutions pour démarrer des opérations long-courrier de manière indépendante cette année.

À noter que Corsair International a relancé fin juin sa liaison entre Paris et Tananarive, supprimée début 2019. La compagnie retrouvera sur cette axe la concurrence d'Air France, de Madagascar Airlines et plus globalement d'Air Austral, d'Air Mauritius, d'Ethiopian Airlines, de Kenya Airways et de Turkish Airlines qui desservent la capitale malgache. ▲

SUMMARY

MADAGASCAR NATIONAL CARRIER

Madagascar Airlines is now the national airline of Madagascar having received its air transport certificate (CTA) and operating license on April 17. The new carrier emerged from the merger between Air Madagascar and Tsadaria.

Thierry de Bailleul, formerly of Air France and Qatar Airways, is the CEO and announced orders for three Embraer 190-E2s. The airline has also a lease-management of six ATR 72s from Air Madagascar serving regional routes, Reunion, Mayotte, Comoros and Mauritius. Bailleul said It is also exploring a number of options to start long-haul operations later this year. ▲

GETJET SET TO EASE PRESSURE ON AFRICA'S SUPPLY CHAIN



Ruta Kulvinskaitė : We are one of the few airlines with additional capacities of aircraft and crew." PICTURE: GETJET AIRLINES

GetJet Airlines – provider of wet lease and charter services – is adding capacity before the high season to meet increased demand for ACMI services. The rise in demand is due to supply chain issues that are also impacting Africa.

The airline's fleet consists of Airbus A320 and Boeing 737NG-type aircraft. Another Boeing 737-800 is expected to join its fleet along with three more Airbus A320-family aircraft.



Ruta Kulvinskaitė, CEO of GetJet Airlines, said that by expanding its fleet the operator will maintain its flexibility and commitments to its clients worldwide.

"We are one of the few airlines with additional capacities of aircraft and crew ready to take on long-term projects or help our clients to overcome challenges by offering ad-hoc ACMI operations."

The Lithuanian IOSA-approved airline and the Nigerian operator Ibom Air have signed a twelve-month wet-lease partnership agreement for two Airbus A320-200, which started commercial operations last November.

GetJet has proven experience in ACMI in West Africa and is also supporting Ibom Air with A320 aircraft maintenance and training crew in Nigeria.

According to specialists, commercial leasing companies will play a crucial role in airline funding and liquidity in Africa, especially in the post-pandemic period.

Lockdowns and varying factors have changed the leasing landscape within Africa.

Even though dry leases, where an aircraft is operated under the Aircraft Operating Certificate (AOC) of the lessor, are more popular options, wet leases are gaining momentum as clients are seeking full aircraft operation. ▲

ANURADHA DEENAPANRAY CHAPPARD

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The aviation industry in Uganda has recorded tremendous progress over the past years. In line with the Uganda Vision 2040, the Government has developed a 20-year National Civil Aviation Master Plan with Entebbe International Airport and other airfields a key component. **Anuradha Deenapanray Chappard** reports.

Entebbe's key role in the Pearl of Africa's revival

A project for the upgrade and expansion of its main gateway at Entebbe, Uganda's former capital, is seen as critical to the development of the air transport industry as passenger and cargo demand continues to grow.

The "Pearl of Africa", depicted by Winston Churchill during his visit to Uganda before its independence, is writing its modern "fairy tale" with a clear, pragmatic, and steady vision.

At the inception of Uganda Civil Aviation Authority's (UCAA) in 1991, the airport handled 118,000 international passengers. In 2019, it handled 1.8 million passengers.

After disruptions due to the pandemic, the airport registered 1.57 million passengers in 2022. During the first quarter of 2023, Entebbe recorded 402,314 passengers compared to 414,431 at the same period, prior to the pandemic.

"The revival and commencement of flights by the national airline, Uganda Airlines, is expected to further grow this traffic in subsequent years,



Steering Entebbe International to new glory: Director general Fred Bamwesigye with Olive Lumonya, deputy director general of Uganda's civil aviation authority.
PICTURE: UCAA

and promote the country's tourism potential", said the airport's director general Fred Bamwesigye.

New operators like Airlink, which started flights to South Africa in September 2021, Air Arabia, with Entebbe to Sharjah, UAE, in October 2021, and Air Kenya, among others, will boost traffic even more, Bamwesigye said.



The overall project for upgrade and expansion of Entebbe International is at 85% level of completion and include the strengthening of the main runway 17/35 and the alternative runway 12/30, and associated taxiways, the rehabilitation of parking apron 4; reconstruction of parking apron 2 and expansion works of the main aircraft parking apron 1 are ongoing.

A new terminal building is under construction in an area previously used for cargo operations to increase Entebbe's capacity from 2 to 3.5 million yearly by the end of this year.



On the up: The Terminal expansion plan at Entebbe is well underway. PICTURE: UCAA

The existing terminal has also been re-modified to provide more space in the departure area. By the end of this month, drop-off facilities will be available at the entrance of the terminal building.

Cargo is also part of the ambitious development. The sector has seen increasing needs to meet higher demand for fresh produce especially fish, flowers, fruits, and vegetables. Uganda's major markets are the Netherlands, Belgium, and the Middle East. Entebbe handled 61,000 metric tons in 2022 compared to 6,600 metric tons of cargo in 1991.

A new state-of-the-art cargo centre with a capacity to handle 100,000 metric tons per year has been built to address bulging demand. Cargo

operations have already shifted to the new facility.

A terminal operations control centre has been set up by Korea International Cooperation Agency (KOICA) to ensure automation of operations as part of a \$9.5 million grant by its government. The project has also delivered a computerised maintenance management system (CMMS), an airport operational database (AODB) system, an ATS message handling system (AMHS) as well as an improved flight procedures efficiency through air traffic management and training/capacity building.

"One of UCAA's strategic objectives is to promote the development of an air navigation

system aligned to the global air navigation plan (GANP). It provides airspace users with improved capacity and efficiency. The air traffic management system has undergone various system improvements and upgrades to enhance safety", said Bamwesigye.

UCAA and Entebbe International Airport obtained the ISO 9001:2015 quality management systems (QMS) certificate in 2021 following compliance with stringent UKAS requirements. Other aerodromes operated and managed by UCAA in Gulu, Arua, Soroti, Mbarara, Tororo, Kisoro, Pakuba, Kasese, Jinja and Kidepo have also been awarded certification for a three-year period up to 2024. ▲

KAA drives change to help unlock

Increasing passenger traffic and air freight is putting pressure on major hubs in Africa with markets recovering gradually in the post-pandemic era. In Kenya, the airport company is investing in smart sustainable airports to keep them hassle-free and enhance operational efficiency and passenger experience. **Anuradha Deenapanray Chappard** reports.

Kenya Airports Authority (KAA) is taking forward-looking measures, needs-based actions and overarching guidelines such as digitisation, technology solutions and sustainability to enhance connectivity and strengthen the Nairobi hub while effectively managing competition.

Managing Director of KAA, Alex Gitari, said: "The strategy highlights the priority placed on route development and actively collaborating with airlines to establish new air connections and increase frequencies on existing routes.

"This approach recognises the importance of attracting more airlines and passengers to solidify Nairobi's position as a key gateway to Africa and

a vital link in the global aviation network."

KAA has taken several measures to boost its post pandemic business recovery including friendly health and safety protocols to ensure passenger confidence and maintain a safe travel environment.

Gitari underlined that collaborative efforts help streamline operations, address challenges, and create a unified approach to revive the industry.

He said that KAA continues to invest in infrastructure development and expansion projects to meet future demand and enhance passenger experience.

"KAA has formulated a comprehensive

development plan for various airports in the country. The strategy includes the construction of passenger terminal buildings at multiple airports, including Jomo Kenyatta International Airport (JKIA), Wilson, Ukunda, Migori, Kitale, and Nanyuki. Additionally, there are plans for the development of JKIA's second runway, taxiway, airfield lighting system, and an aviation rescue and firefighting centre", Gitari said.



Moi International Airport will undergo ground and slope stabilisation for environmental and safety enhancement, while Wilson Airport will see improvements to its runway and apron. Eldoret International Airport is set for a runway extension and cargo apron expansion, and Isiolo Airport will undergo runway and apron extension.

Other priorities include the installation of perimeter and security fencing at JKIA, water reticulation at the airport, construction of parking silos at JKIA and Wilson, and the

Africa's potential

establishment of solar farms at JKIA, Kisumu International Airport (KIA), Eldoret International Airport (EIA), Wajir Airport, and Isiolo Airport. Additionally, land acquisition efforts are underway in Malindi and Ukunda.

"These development projects reflect KAA's commitment to improving infrastructure, enhancing safety, and expanding operational capabilities at various airports throughout Kenya and connect efficiently to the aviation global circuit. "



KAA has also invested in digital solutions to streamline processes and reduce physical contact points through online check-in, touchless technologies at the new rehabilitated T1BC, and self-service kiosks at JKIA.

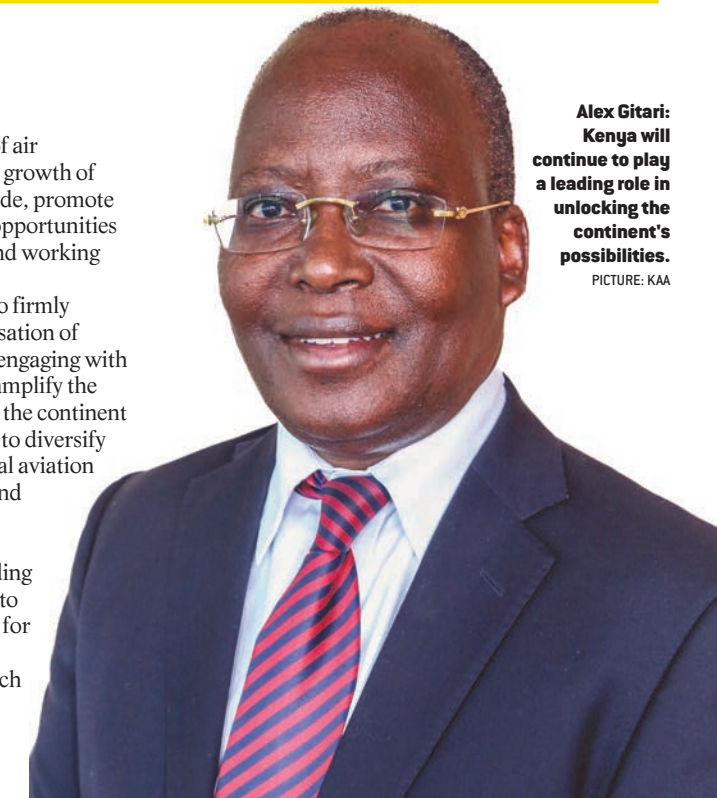
"As a prominent player in the African aviation industry, Kenya will continue to play a leading role in unlocking the continent's possibilities by actively supporting and participating in the implementation of SAATM. ▲

"By prioritising the expansion of air connectivity, Kenya will foster the growth of businesses, facilitate increased trade, promote tourism, and create ample travel opportunities for the burgeoning middle class and working population in Africa", Gitari said.

Kenya Airports Authority is also firmly committed to supporting the realisation of SAATM's objectives and actively engaging with stakeholders to advocate for and amplify the benefits that SAATM can bring to the continent as well as exploring opportunities to diversify revenue streams beyond traditional aviation activities and providing training and consultancy services for capacity building within Africa.

KAA is also focusing on expanding its cargo and logistics capabilities to capitalise on the growing demand for efficient supply chain solutions.

The growth of e-commerce which has accelerated during the pandemic is driving increased demand for air cargo services. ▲



Alex Gitari: Kenya will continue to play a leading role in unlocking the continent's possibilities.
PICTURE: KAA

La Guinée-Conakry déploie sa feuille de route de modernisation

La principale porte d'entrée de la Guinée-Conakry, l'Aéroport International Ahmed Sékou Touré fait l'objet d'importants travaux d'extension et de modernisation pour porter sa capacité à 3 millions de passagers par année.

Anuradha Deenapanray Chappard a rencontré le directeur général, Namory Camara.

Même si 35% du trafic passagers (600 000 en 2022) provient d'Europe, le marché asiatique/chinois se développe rapidement. Ce projet ambitieux s'inscrit dans le plan national de développement, notamment le projet minier de 20 milliards de dollars. D'où, la bonne santé de l'aviation d'affaires qui représente 40% de son trafic passager.

Les travaux ont été lancés le 8 avril dernier. L'actuel site restera en activité pendant les différentes phases de travaux. La première phase d'un montant de 26 millions d'euros sera livrée fin septembre 2023.

Le contrat a été remporté par le groupe Albayrak (constructeur), dans le cadre d'un partenariat avec la Société de Gestion et d'Exploitation de l'Aéroport de Conakry (SOGEC, maître d'ouvrage).



PICTURE: SOGEAC

▼ Il est nécessaire d'accélérer la libéralisation au niveau régional. ▲
NAMORY CAMARA

Ce projet initié est mis en œuvre sous la tutelle du ministère des Transports comprend un nouveau terminal de 32.000 m², un nouveau terminal cargo de 5.600m², une nouvelle tour de contrôle, une caserne des pompiers répondant aux normes de l'OACI, un bâtiment administratif, un pavillon présidentiel, un bâtiment de la Gendarmerie du Transport Aérien (GTA) et un complexe hôtelier.

De nouvelles voies de circulation vont également être aménagées pour développer le trafic sur l'aéroport.

La première phase, d'un montant de 26 millions d'euros, sera livrée fin septembre 2023.

L'aéroport a choisi un partenariat public-privé pour son projet d'extension. Ce modèle est de plus en plus courant en Afrique de l'Ouest. « Les aéroports doivent être gérés comme une entreprise. Nous avons besoin de développeurs clés et ouverts aux investisseurs étrangers. Mais nous

devons surveiller et maintenir un équilibre sur les concessions pour une situation gagnant-gagnant », affirme le directeur général Namory Camara.

La Guinée-Conakry a enregistré le deuxième taux de récupération le plus élevé par rapport à 2019 après le Botswana.

Selon Namory Camara, il est nécessaire d'accélérer la libéralisation « au niveau régional » pour améliorer la connectivité intra-africaine, moderniser les infrastructures aéroportuaires grâce à des investissements publics et privés. En parallèle, il faut résoudre les problèmes de visas et de taxes, et encourager les synergies et les partenariats africains. Il souligne également le rôle vital de la bonne gouvernance pour attirer les investisseurs et libérer le potentiel inexploité de l'industrie.

« En 2018, Dubaï était le point de connexion de l'Afrique. Maintenant, c'est Addis-Abeba. Il se passe des choses », souligne le DG de l'Aéroport Guinée-Conakry. « Nous devons encourager le SAATM et l'AFCAC. Le secteur de l'aviation devrait être considéré comme un secteur plus large et non comme un marché isolé. Nous ne pourrions pas avoir une industrie aéronautique robuste sans un ciel ouvert. Cette démarche sera en accord avec les changements en cours en Afrique », ajoute Namory Camara.

« La réduction des taxes et des prix pour rendre les prix plus abordables dépendra des décisions du gouvernement », ajoute Namory Camara. À noter que les taxes peuvent représenter 40 à 50% du prix des billets sur certaines destinations.



Piste de l'aéroport Paris CDG. PICTURE: ALAIN LEDUC - GROUPE ADP

LE GUICHET UNIQUE DE LA TRANSFORMATION

Le secteur aéroportuaire mondial traverse de nombreuses mutations. Il s'agit aujourd'hui de développer des modèles plus durables et plus résilients, d'innover en matière de construction et d'expériences passagers, bref inventer l'aéroport du futur.

Face à ces défis, le Groupe ADP a lancé « Groupe ADP Airport Services » pour répondre aux enjeux de la transformation aéroportuaire. Cette filiale regroupe l'offre de conseil en matière de développement, d'exploitation et de gestion aéroportuaire. Elle a pour ambition de donner accès aux expertises du groupe via un guichet unique dans toutes les régions du monde. Elle s'appuie sur le savoir-faire de ses collaborateurs, ses partenaires et ses filiales, dans le but de répondre aux besoins des aéroports à travers le monde.

Cette offre de consulting et d'ingénierie à

l'international s'organise autour de trois grands piliers : le développement des infrastructures (nouvelles ou existantes) ; les opérations aéroportuaires avec une large gamme de services techniques et de la gestion d'actif. Cela passe par une expertise de très haut niveau pour optimiser le retour sur investissement et développer les revenus aéronautiques et non aéronautiques.

Au cours des deux dernières décennies, le Groupe ADP a mené et livré plus de 1000 projets aéroportuaires à Paris et dans le monde entier. Avec ses partenaires, filiales et marques TAV Airports, ADP International, Hub One, Hologarde, Merchant Aviation, Exttime, entre autres, il opère sur l'ensemble de la chaîne de valeur du secteur aéroportuaire.

ANURADHA DEENAPANRAY CHAPPARD

SUMMARY

GROUPE ADP'S ONE-STOP SHOP FOR TRANSFORMATION

The global airports sector is going through many changes, especially regarding the development of more sustainable and resilient business models.

To this end, the organisation responsible for Paris' airports has launched 'Groupe ADP Airport Services' designed to meet these challenges.

The plan gives access to the Group's expertise via a global 'one-stop shop', relying on the know-how of its employees, partners and subsidiaries.

This international consulting and engineering offer is organised around two main pillars: Infrastructure development (new or existing); and airport operations, including a range of technical services and asset management, both of which require high-level expertise to optimise return on investment while developing revenues.

Over the past two decades, Groupe ADP has delivered more than 1,000 airport projects around the world, along with its partners: TAV Airports; ADP International; Hub One; Hologarde; Merchant Aviation; and Exttime, among others, operating across the entire value chain of the global airports sector.

SUMMARY

THE GUINEA-CONAKRY ROADMAP FOR THE FUTURE

The main gateway to Guinea-Conakry, Ahmed Sékou Touré International Airport, is undergoing major expansion and modernisation work to increase its capacity to 3 million passengers per year.

Even though 35% of passenger traffic (600,000 in 2022) comes from Europe, the Asian/Chinese market is growing rapidly. This ambitious project is part of the national development plan, in particular the \$20 billion mining project. Hence the good health of business aviation, which represents 40% of its passenger traffic.

The current site will remain operational during the work. The first phase, valued at \$27 million will be delivered at the end of September 2023.

The airport has chosen a public-private partnership for the expansion project. This pattern is increasingly common in West Africa.

"Airports should be run like a business. We need key developers who are open to foreign investors. But we have to monitor and maintain a balance on the concessions for a win-win situation," said general manager Namory Camara.

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MYSTERY OF EGYPT'S KOREA TRAINER DEAL

The Arab Organisation for Industrialisation (AOI) announced in November 2022 that it had signed an agreement with Korea to locally produce the KAI T-50 advanced trainer in Egypt – but is that announcement all it seems?

When the South Korean Black Eagles formation display team visited Egypt in August 2022 to participate in the Pyramids Air Show, Korea Aerospace Industries (KAI) – manufacturer of the team's T-50 aircraft – said it was negotiating an agreement with Egypt.

Under the terms of this agreement announced by Lee Bong Keun, senior vice-president and general manager of KAI's International Business division, Egypt would jointly produce and market the armed FA-50 version of the T-50 trainer.

"Egypt will become a key base covering the entire African and Middle Eastern markets," said Lee.

An Egyptian air force requirement for as many as 100 aircraft promises a hard-fought competition between OEMs, though the FA-50, with its high level of compatibility with the Lockheed Martin F-16, could have a real edge.

On 16 January, the AOI released a statement revealing that its chairman, Mokhtar Abdel-Latif, had met a South Korean delegation that included senior officials from KAI and Hanwha Aerospace, as well as members of parliament, and had signed an agreement with KAI on 30 November 2022, to locally manufacture

advanced training aircraft. It was said that the aircraft would be built at the AOI Aircraft Factory in Helwan, which previously produced under licence a similar number of Chinese Hongdu K-8E trainers for the Egyptian air force. By the time the 120th and final K-8E was delivered in May 2010, Egypt was reportedly producing "more than 94% of the aircraft".

But at this year's Avalon Airshow, from 28 February to 5 March, KAI chief executive Kang Gu-young said his company was still hoping to win preferred bidder status in Egypt's competition to find a partner with whom it would locally produce jet trainer and lightweight fighter aircraft. He clearly did not feel that the plan to export the T-50 Golden Eagle to Egypt was anything like a 'done deal'.

The recent contracts for 18 FA-50s for Malaysia and 36 for Poland has reinvigorated KAI efforts to expand its global reach, and an Egyptian order for the FA-50 would mark KAI's first export success in the African military aircraft market.

"Egypt's strategic geographic location (between the northeast corner of Africa and Western Asia) would then open many other doors of opportunity," Kang said. ▲

Major milestone in Rafale export programme

The Egyptian air force has celebrated the completion of 10,000 flying hours by its fleet of Dassault Rafale fighters, becoming the first Rafale export customer to do so.

A formal ceremony was held in the presence of senior Egyptian authorities and Dassault Aviation representatives at Gebel el Basur air base (Beheira), home to Egypt's Rafales, which serve with the 203rd Tactical Combat Wing.

Eric Trappier, chairman and chief executive of Dassault Aviation, said: "This celebration around the 10,000 flight hours of the Rafale salutes the great mastery of the Egyptian air force, the excellence of the Rafale, and honours Dassault Aviation, which has maintained strong relations with Egypt based on trust and commitment for nearly 50 years."

Egypt became the first export customer for the Rafale with an order for 24 examples in 2015. Sixteen Rafale DM two-seaters and eight Rafale EM single-seaters were delivered between 2015 and 2019.

A second order, for 30 Rafales, was delayed until February 2021 while a solution was found to International Traffic in Arms Regulations (ITAR) and Missile Technology Control Regime (MTCR) considerations which blocked the delivery of MDBA SCALP-EG air-launched cruise missiles.

When these examples are delivered, the Rafale will become the second most numerous fighter type in Egyptian air force service, after the 200 or so Lockheed Martin F-16 Fighting Falcons in use. ▲



Rafalation: The Egyptian air force has celebrated the completion of 10,000 flying hours.

PICTURE: DASSAULT

UP IN THE AIR:
Egypt's T-50 deal still a waiting game for KAI.
IMAGE: KAI



IN BRIEF

Angola buys Aksungur drones

Angola has become the first confirmed African customer for the Turkish Aerospace Industries (TAI) Aksungur medium-altitude, long endurance (MALE) unmanned aerial vehicle (UAV). Confirming the sale, Omer Yildiz, TAI (TUSAS) general manager for UAVs, said the aircraft was in production for export customers Angola and Kyrgyzstan, but that deliveries had not yet begun.

Angola requested Turkish UAVs and armoured personnel carriers after a visit by Angolan president Joao Lourenco to Turkey, with the Angolan public corporation Simportex approving a \$93 million contract with TAI for UAVs in October 2022.

The Aksungur UAV can be configured into three mission variants: surveillance and reconnaissance, ground attack, and maritime patrol versions. Eight Aksungur UAVs had been completed by the end of 2022, and another six were in build, with the production rate increasing from four per year to one per month.

CH-47F for Egypt

The Egyptian air force will receive 12 new CH-47F Chinook advanced multi-mission helicopters under terms of a US Army foreign military sales contract, valued at \$426 million, awarded to Boeing. These will replace Egypt's long-serving fleet of CH-47D aircraft, with initial deliveries due to begin in 2026. The US State Department approved the sale of up to 23 CH-47F models in May 2022.

The new Chinook variant has improved mission performance and handling characteristics and also features a fully integrated digital cockpit management system, a common avionics architecture system (CAAS) cockpit and advanced cargo-handling capabilities. Ken Eland, vice-president and H-47 programme manager, said: "The F-model aircraft will enhance Egypt's Chinook capabilities and help effectively accomplish its heavy-lift objectives."

The contract continues a partnership of more than 40 years between Boeing and Egypt. "Boeing's partnership with the Egyptian air force remains strong as we continue to work together to modernise their fleet," Eland said.

Mauritius receives Dhruv

The government of Mauritius has taken delivery of a Hindustan Aeronautics Limited (HAL) Dhruv Mk III advanced light helicopter (ALH) for use by the Mauritius Police Force (MPF). The aircraft arrived in Mauritius on 10 February, transported to the island on board an Indian Air Force C-17 Globemaster III airlifter. An initial Dhruv was delivered to the MPF's Police Helicopter Squadron (PHS) in 2009, and operates alongside four HAL Chetaks and an Airbus Helicopters Fennec.

The Coast Guard's Maritime Air Squadron operates a single Britten-Norman BN-2T Defender and three Dornier Do 228s, delivered by India in 1990, 2004 and 2016. In September 2022, India supplied a Do 228 to Mauritius under a free lease deal until a new Do 228 was handed over by HAL in April 2022.

Botswana looks to India for fighter upgrade

Botswana may have found a replacement in India for its defence force's ageing fleet of Canadair CF-5 Freedom Fighter aircraft.

The Botswana Defence Force (BDF) is reportedly in talks with India's state-owned Hindustan Aeronautics Limited (HAL) with a view to acquiring the Tejas fighter aircraft.

This was confirmed during the Aero India show at Bengaluru earlier this year, when C B Ananthakrishnan, HAL's chairman and managing director, confirmed that the company had received expressions of interest in the Tejas light fighter from Botswana, as well as from Egypt and Argentina.

If taken to a successful conclusion, it would mark the end of a 10-year search for aircraft to replace the BDF's ageing fleet of Northrop/Canadair CF-5 Freedom Fighters, which have become increasingly difficult to support.

Since 2013, in the face of fighter modernisation projects in neighbouring Zambia and Namibia, the BDF has been attempting to replace 10 CF-5A and three CF-5D fighters and fighter trainers

— known locally as the BF-5 — which were acquired from Canada in 1996, along with three more CF-5As and two CF-5Ds that followed in 2000. These aircraft serve with Z28 fighter squadron stationed at Maparangwane Air Base on Thebephatshwa Airport in the south-eastern region of Kweneng, and are used for air defence and close air support.

□□□□□

In 2013, Major General Odirile Mashinyana, at the time head of the BDF Air Wing, authored a report recommending the modernisation of the BF-5 fighter fleet. A preliminary cost-benefit study revealed that an upgrade to the BF-5 fleet would not be cost-effective.

That November, the Botswana minister of defence, Ramadeluka Seretse, had preliminary meetings with South Korea's Korea Aerospace Industries (KAI) to discuss a potential

acquisition of the KAI T-50/FA-50 Golden Eagle lightweight fighter, and Botswana president Ian Khama visited South Korea and KAI in October 2015. But interest in the T-50/FA-50 had waned by 2016.

Botswana's interest in 16 second-hand Lockheed Martin Block 40 F-16s was firmly rebuffed by the US, on the grounds that such a procurement could have triggered an escalating arms race in the region.

Botswana's attention then shifted to the procurement of 8-12 Saab JAS-39C/D Gripen fighters, at a projected cost of \$1.7 billion. Many BDF senior officers favoured a Gripen purchase because it offered a degree of interoperability with South Africa's JAS-39C/D fleet, offering potential for shared training and maintenance, repair, and overhaul (MRO) infrastructure.

President Khama visited Saab's headquarters in June 2017 and met then-prime minister Stefan Lofven of Sweden.



Tejas: On the horizon for Botswana.
PICTURE: HAL

The Gripen project stalled after Khama left office in 2018.

South Korea revived its efforts to sell the FA-50 to the BDF in 2017, arguing that Gripen's life-cycle cost was "three times" that of the FA-50, including higher procurement and operational costs. But Botswana judged that the Korean aircraft's operational capabilities did not meet its requirements,

especially in terms of radar and weapons capabilities as well as payload/range.

Meanwhile, as the HAL talks continue, Botswana faces a quandary keeping its BF-5 fleet in the air. Canadair no longer maintains configuration control for the CF-5, and there is no active production line, forcing operators to rely on third parties or cannibalisation for spares. ▲

BURKINA FASO SHOWS OFF ITS UNCREWED STRENGTH

A high-profile induction ceremony in Ouagadougou saw the Burkina Faso air force, l'Armée de l'Air Burkinabé, officially presented with a range of aircraft types new to its fleet, though most have actually been in service for some years.

Three Turkish-built Baykar Bayraktar TB2 unmanned aerial vehicles (UAVs), some of them armed with precision guided munitions, together with single examples of Mi-17, Mi-24 and Mi-26 helicopters, were on show at Air Base 511 at the March event that was attended by Burkina Faso defence minister Kassoum Coulibaly and chief of general staff David Kabre.

□□□□□

Burkina Faso is understood to have taken delivery of its first Bayraktar TB2 UAVs between April and May 2022, and five aircraft have been used in attacks against terrorist and insurgent targets, including groups of terrorists travelling on motor cycles.

Since 2016, it has faced a growing threat from rival Islamist terror groups affiliated with the Islamic State group and with al-Qaeda, resulting in 10,000 casualties, and the displacement of some two million people.

The West African state joins a number of African nations which acquired the TB2 following its successful deployment during the Nagorno-Karabakh conflict in 2020.

The aircraft then was already in service with Libya's GNA, where large numbers have been used since 2019.

Morocco received its first TB2 in September 2021, and four were delivered to the Ethiopian Air Force in November 2021, subsequently



operating from Bishoftu Airbase, near Addis Ababa, against Tigrayan forces.

The first publicly announced TB2 order by an African nation came from Niger and was disclosed by Turkish president Recep Tayyip Erdogan in November 2021. The delivery of a first batch of six aircraft to Niger was announced in May 2022.

Other confirmed customers for the Bayraktar TB2 in Africa include Djibouti, which has now received at least three aircraft, two of which were displayed during its Independence Day

military parade on 27 June 2022, while Togo started flying at least three TB2s from Niamtougou air base in 2022. Nigeria and Mali commissioned the type in late 2022, and Rwanda and Tunisia have been listed as TB2 operators.

The TB2 is also reported to have been seen operating in Somalia, although the aircraft spotted may have been Turkish, given that Turkey has a military base in-country and has been providing support, training and equipment to the Somali military. ▲

On show: Turkish Bayraktar UAVs were on display in Burkina Faso as its air force showed off new capabilities.

PICTURE: BAYKAR



ARMED MWARI FOR LAUNCH CUSTOMER
include weapons systems. PICTURE: PARAMOUNT

ARMED MWARI FOR LAUNCH CUSTOMER

South African defence company Paramount is integrating weapons systems on the Mwari turboprop-powered light attack and surveillance aircraft for its launch customer.

Mike Levy, chief executive of Paramount Aerospace Industries, refused to confirm what weapons were being integrated nor to give an exact timeline, but did say that the launch customer would be operating armed aircraft "soon".

The Mwari was originally branded as the advanced high-performance reconnaissance light aircraft (AHRLAC) but was renamed the Mwari in 2021.

The AHRLAC experimental demonstrator (XDM) made its maiden flight in July 2014, and the second prototype, known as the advanced demonstrator (ADM), followed as a testbed for armaments and mission systems. One of the prototypes was noted flying in Mozambique in mid-2021, presumably on demonstration trials.

Paramount flew the production-standard aircraft in April 2022.

The Mwari is not South Africa's first indigenous aircraft programme: Denel developed and produced the Rooivalk attack helicopter (among other types), but it is the first to be exported.

Paramount has said nine customisable Mwaris are currently on order for "multiple" unnamed customers, with four aircraft in build at a new factory at Wonderboom airport, near Pretoria.

Paramount supplied the first production Mwari customer aircraft to an unnamed African customer in September 2022, and the same customer was also due to take delivery of a second aircraft in March 2023.

The third Mwari built (ZU-MWA, now wearing the military registration FA-402, the first of two pre-production aircraft) has been seen operating in the troubled Cabo Delgado region in Mozambique, and there has been speculation that Mozambique is the type's launch customer. ▲

IN BRIEF

Senegal's second C295

Senegal's Armed Forces have taken delivery of a second Airbus C295 transport aircraft (6W-TTE). The aircraft arrived at Dakar air base (Ouakam) on 31 March, where it was officially received by defence minister Sidiki Kaba. Senegal had received its first C295 (6W-TTD) in July 2022. This formed part of a modernisation and expansion programme which also saw the delivery of two Mi-17 and four Mi-35 helicopters.

The C295s will augment two older CN235 aircraft that were manufactured by PT Dirgantara Indonesia (PTDI).

The first CN-235-220M was delivered in 2017, the second, a CN-235-220MP in maritime patrol configuration, was delivered in 2021. This aircraft was fitted with a 360° Ocean Master search radar, automatic identification system (AIS) and a forward-looking infrared (FLIR) sensor turret.

The C295s are expected to be used for transport, paratrooping and medical evacuation, supporting the Army in its long-running campaign against Islamist terror groups in the Sahel, including separatists in its Casamance region.

Examples of the C295 have been delivered to Burkina Faso (one in November 2021), Mali (in December 2016 and May 2022) while Angola ordered three C295s last year. The Nigerian Air Force is also hoping to acquire at least one C295.

HH-60W's first rescue in Africa

The USAF's new Sikorsky HH-60W Jolly Green II search-and-rescue (SAR) helicopter made the type's first real-world overseas rescue during its first combat deployment to the Horn of Africa. The HH-60Ws deployed overseas for the first time in September 2022, soon after being declared combat-ready.

A combined force of deployed US assets from the 435th Air Expeditionary Wing in Djibouti operated together to save the lives of two partner forces personnel in late December 2022. The 303rd Expeditionary Rescue Squadron HH-60Ws (assigned to the 449th Air Expeditionary Group at Camp Lemonnier) picked up the injured personnel, and their para-rescue team administered stabilising emergency medical care in the helicopters' cabin as they flew to the nearest medical facility for trauma surgery.

A Lockheed HC-130J Combat King II aircraft then moved the most seriously-wounded casualty to another location for further treatment.

The 449th Air Expeditionary Group is responsible for personnel recovery, regional airlift, base support, intelligence collection and airfield operations in support of US Africa Command, US Central Command and foreign militaries in East Africa.

The successful rescue was a welcome shot in the arm for the HH-60W, whose acquisition has been scaled back to 85 aircraft from 113. The USAF is now looking at "several" non-traditional options to recover downed aircrew from deep within contested environments. ▲

New lease of life:
South Africa's C-130.
IMAGE: SAAF



Facelift for SAAF's old timers

The South African Air Force (SAAF) has been granted funds to help keep at least some of its small fleet of elderly but vital transporters airworthy, reports Alan Dron.

The chances of South Africa retaining a medium transport capability have improved after the government granted an R 1 billion (\$55 million) funding package to upgrade some of the SAAF's Lockheed Martin C-130 Hercules fleet.

The additional National Treasury cash will be used to bring aircraft up to modern standards.

The SAAF fleet of eight C-130BZs are some of the oldest operational examples of the type in the world, with the initial examples delivered in 1963 – 60 years ago. The aircraft are considered vital, notably for supporting South African troops in their longstanding peacekeeping mission in the Democratic Republic of Congo (DRC).

These have not always been sufficient for the task of moving heavy equipment to and from the DRC. On occasions, the SAAF has had to hire commercial Ilyushin IL-76 transports, with their heavier payload.

The SAAF initially received nine C-130BZs, with a further two being delivered from surplus US Air Force stocks in the late 1990s. The respected South African Defence website notes that two of the C-130s have been written off in accidents and a third has been cannibalised for spares, leaving a total of

eight available aircraft. It appears that, even with the recent infusion of cash, that number will shrink.

As the new funding becomes available, "The aim is to gradually address only six of current C-130BZ aircraft," a South African National Defence Force (SANDF) spokesman told *African Aerospace*.

"The R 1 billion will only address the servicing of four aircraft, urgent regulatory and obsolescence issues and procurement of engine and avionics spares. The R 1 billion will not address the full requirement and upgrade of six aircraft. The total upgrade is estimated over a period of six years."



South African defence company Armscor, which will be involved in the refurbishment, will focus on the aircraft's avionics system "to address critical airworthiness and obsolescence issues," said a company spokesman. "Furthermore, major services will be conducted on certain aircraft. The work will take around 18 months to be completed.

"Armscor has done similar work on the avionics for the C-130 before. It is important to note that the last time the C-130 had any work done on the avionics system was more than 15 years ago."

It is believed that the major servicing part of the programme will be handled by UK company Marshall Aerospace, which has extensive experience with the C-130.

One potential route to restoring the

number of aircraft in the SAAF inventory is by acquiring more surplus US Air Force models and two examples of the rather more modern C-130H have been offered to South Africa.

However, this possible solution brings its own problems. The C-130H examples are completed to a different baseline standard than the SAAF C-130BZs.

"Comparison studies concluded that it would be more cost efficient and feasible to service and upgrade six of the current SAAF C-130BZ fleet," according to the SANDF.

"To bring the USAF C-130H aircraft back into service, conduct the required servicing, address the regulatory upgrades and to maintain and operate the two different baselines would require significant additional funding."

With South Africa's defence budget severely limited, and no improvement in sight for the near future, a further increase in funding is unlikely, although not completely out of the question.

Ironically, the need to keep the C-130BZs operational would not arise if South Africa had continued with its original plan of replacing them with the Airbus A400M Atlas. The country ordered eight A400Ms early this century, but cancelled them in 2009, citing increasing costs.

The A400M's payload/range combination would have been ideally suited for the SAAF's regional responsibilities, especially flights to the DRC. With that option long gone, there seems little choice but to keep the elderly C-130BZs flying for as long as possible. ▲

Chukwu Emkele meets the man tasked with filling the spaces in Nigeria's airspace management system.

PWAJOK'S BLIND DATE...

Last year, Nigeria became the first country in Africa to implement free routing airspace – giving airlines capacity and ability to fly any direction freely, rather than going on fixed routes.

The managing director of the Nigerian Airspace Management Agency (NAMA) – the agency behind the progress – Matthew Lawrence Pwajok is a man on a mission.

The agency is working to enhance the security, effectiveness, efficiency and management of the country's airspace through equipment upgrade, training, partnerships, as well as addressing the blind spots in the Niger-Delta region and the Gulf of Guinea, among other measures.

In an exclusive interview Pwajok said NAMA has been able to complete installation of the surface movement radar and ground control in Abuja. "We just completed site acceptance test of the equipment. It has been test run and is functioning effectively, and ready for commissioning," he said.

Pwajok said the two priorities and objectives set by his agency for 2023 were to ensure the completion of these critical ongoing projects before the transition to a new government in May – and to prepare for ICAO's universal oversight safety audit scheduled for August 2023.



Equipment for installation of multilateration facility in the Niger-Delta region was due for completion in June. The wide area multilateration project in the Gulf of Guinea is a surveillance system intended to cover the whole of Niger-Delta and be able to provide surveillance and effective control and management of low-level helicopters.

"We have done the factory training of the engineers and the operational personnel last year, 2022. So, the system already has technical and operational personnel that will maintain and upgrade it," he said. "One significant aspect of this project is that it provides capability for monitoring unmanned aircraft systems too."

Pwajok who was in the ministry of aviation's delegation to France in March 2023 for the factory acceptance test for some of NAMA's telecommunication equipment in the TRACON project said with the availability of funds, the modernised total radar coverage project was expected to be completed in nine locations across Nigeria in 2023.

▼ What we have done is to take care of the project's blind spots.▲
MATTHEW LAWRENCE PWAJOK

"The communication equipment comes from France and the VSATs are from Germany while the multiplexers are from France," he said, adding that there were VSATs in 24 Nigerian airports based on NAMA's AIS automation project and that the VSATs were being upgraded to 5G network.

On the challenge of blind spots in the airspace, Pwajok said: "We have completed the extended range voice communication system."

"What we have done is to take care of the project's blind spots. These are normal situations because of the expansion of our airspace architecture. Nigeria has had a high number of aerodromes, state owned airports that have been developed and gone on stream into the air navigation system."



"These new airports require connectivity. Airways have to be connected or developed to connect these new airports with other destinations in the country and when these new routes were provided, they were not captured in the architecture of the existing communication systems and so, it is normal to begin to have challenges in terms of voice communication in the upper airspace."

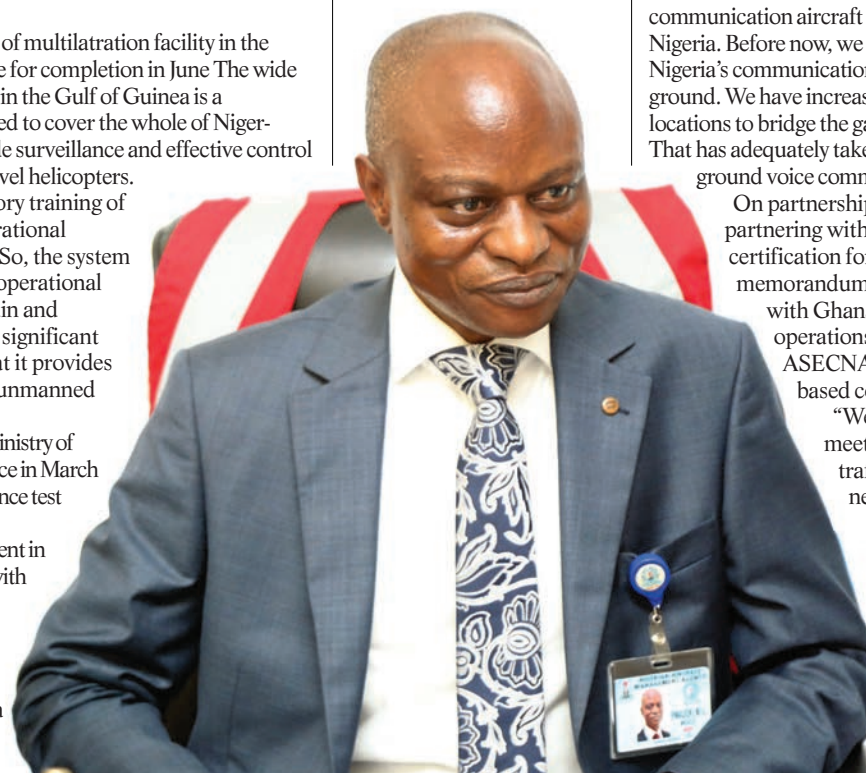
"What we have done is to increase the number of remote communication aircraft systems to increase the coverage over Nigeria. Before now, we had eight satellite stations covering Nigeria's communication ground to ground and air to ground. We have increased that to 14. We added six new locations to bridge the gap in air to ground communication. That has adequately taken care of the challenges of air to ground voice communication," he said.

On partnerships, Pwajok said NAMA was partnering with a UK firm to get signed up or get certification for its own engineers. Also, a memorandum of understanding has been signed with Ghana on cross border search and rescue operations while NAMA partnered with ASECNA in the implementation of satellite based communication system.

"We also have inter-FIR coordination meetings. We signed agreement on air traffic management with all our neighbours."

"We signed agreements with Ghana, Benin Republic, Togo, Chad, Cameroon and DRC. We have agreements with these countries on exchange of flights."

"We have also entered into collaboration on air traffic management contingency planning," he concluded. ▲



PICTURE: NAMA



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Business charter increased globally during the pandemic and Nigeria is one country enjoying its growth. **Marcelle Nethersole** speaks to **Alex Izinyon**, vice chairman and co-founder of Izy Air.

THE SECRET OF WHY IZY IS SO BUSY...

“We saw a jump in aircraft sales during and after the pandemic, we saw increase in value of aircraft – especially the specific categories of aircraft we operate,” said Alex Izinyon, vice chairman and co-founder of Izy Air.

“We have had more demand for chartered services even from an emergence of new types of flyers who were not in the category of charter clients before. We have new flyers who put funds together to fly private rather than go commercial.”

Izy Air started off with aircraft management services in 2011, after which it decided to go into full operations and it applied for its Air Operator’s Certificate (AOC).

“We have always aspired to do things differently. So when we saw a gap in the industry which was lack of consistency and integrity in business aviation, especially charter services offered in the market, and we knew clients needed reliability, clients needed to have the confidence that they could charter an aircraft and actually go to sleep knowing that their charter, at the time they stated, and the quality they expected, would be delivered – we decided to start private charter,” said Izinyon.

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Izinyon said that the company has ‘thrived’ since receiving its AOC by ‘staying true to our core values and vision.’

“We strive to do everything excellently and differently – and we have broken this down to every aspect of our services,” he explained. “The whole drive was to create consistency in delivering the excellence, and at a cost that was beneficial to our clients. We have seen business thrive since we received the AOC. We have expanded into offering multiple services regionally and globally, and we do a lot more international charters.”

Of course, there are always challenges. For Izinyon, one of the biggest is maintenance and spare parts importation.

“Even though we have governmental support with regards to importation of aircraft parts, where commercial air transport operator registered in Nigeria can get duty-free importation of aircraft, engine and spare parts. But there are some divisions of the government that do not understand our business and whose policies frustrate this exemption privilege.



“The frustration comes from the need for us to first obtain an IDEC (Import Duty Exemption Certificate) before our spares can be imported duty-free. The bottlenecks we face before approval can leave our parts stuck for weeks or even months. It is an issue we need the government to resolve.”

Izinyon added: “There is also a misconception that we are private operators without a license to operate commercially. To many, that implies we are in the same category as private aircraft owners. This is wrong? By receiving an AOC, we are certified to operate commercially and because of that, we are mandated by law to pay certain returns to the NCAA which we do, and we meet all the requirements. We operate non-scheduled commercial flights as opposed to the scheduled-commercial airlines. Hence, there have been constant battles with the agencies involved in taking our operations as private operation rather than an approved commercial operation with an AOC.”

□□□□□

Izy Air customers are high net-worth individuals and business individuals whom Izinyon said need to get from one point to another at a specific time and with tight time schedules.

“This ranges from leaders of top companies, to entertainers and individuals that have time sensitive itineraries and need to be in multiple places within a tight schedule,” he said.

Its fleet consists of Bombardier Aircraft – specifically chosen for the larger cabin sizes preferred by the company’s clientele, and Izinyon said the company is very proud to employ only Nigerian or African pilots.

Izy Air currently has expansion plans, which, he said, will be revealed later in the year.

“We are currently working towards some very major expansion and would rather not disclose this until all the plans are executed – but we will be covering more routes and more classes of clients.” ▲

Alex Izinyon: “We strive to do everything excellently and differently – and we have broken this down to every aspect of our services.” PICTURE: IZY AIR



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While sustainable aviation fuel (SAF) is now widely recognised as being key to decarbonising aviation in the near and long term, Africa is trailing behind in the greener vapour trails of its global counterparts when it comes to accessing SAF and its benefits. **Chloë Greenbank** reports.

LACK OF DEMAND STALLS SAF PROGRESS IN AFRICA

Produced from renewable feedstocks and residue raw materials including used cooking oil, solid waste from homes and businesses, and food scraps that would otherwise go into landfill or incineration, SAF gives a reduction of up to 80% in carbon emissions over its lifecycle compared to the fossil fuel it replaces.

Blended at up to 50% with fossil jet fuel, it is re-certified as Jet A or Jet A-1 and can be dropped or pumped straight into turbine engine aircraft fuel tanks.

With aviation considered a hard-to-abate sector, SAF has an immediate impact on reducing carbon emissions.

In 2016, a South African Airways and Mango Airlines flight between Johannesburg and Cape Town marked a milestone for Africa's aviation sector, when it became the first on the continent to refuel with SAF.



The flight used a domestically-grown feedstock from the Limpopo region of South Africa as part of project solaris, which was supported by local feedstock developer, SunChem SA, and fuel supplier, SkyNRG.

However, since then Africa's SAF journey has stalled.

Farai Chireshe, energy analyst and project officer at WWF South Africa, which was also engaged in the 2016 refuelling, explained: "While there's been some progress with SAF refuelling elsewhere in the world, there's been nothing on a commercial scale on the African



Farai Chireshe: "While there's been some progress with SAF refuellings elsewhere in the world, there's been nothing on a commercial scale on the African continent since 2016."

PICTURE: FARAI CHIRESHE.

continent since 2016. There are multiple reasons for this. But, ultimately, the lack of supply comes down to a lack of demand, which is driven by the higher cost and a lack of understanding or awareness of SAF and its benefits."

Key to shifting that drive in supply and demand will be government policies and SAF mandates. "In Europe and the US, where mandates and incentives are being introduced, they are having an impact on production and

uptake. But, to date, there aren't any African countries that have adopted such policies," noted Chireshe.

Recognising that a domestic SAF industry could be a pillar of Africa's low-carbon economy, play a key role in the country's energy transition, and represent an important export opportunity, WWF launched its waste-to-wing project in collaboration with fuel supplier, SkyNRG, and enterprise development specialist, Fetola, in 2018.

A first of its kind in the country, the project set out to determine the feasibility of using waste biomass to produce SAF in South Africa. Some 25 small and medium sized enterprises trialled the development and supply of SAF feedstocks, as well as demonstrating how to pre-treat them before converting to SAF.



A blueprint produced from the project revealed that South Africa has the immediate technical potential to produce 3.2 billion litres of SAF annually. "Introducing green hydrogen into the SAF manufacturing process could extend this potential to 4.5 billion litres per year," Chireshe added.

"While our analysis showed that the technical potential for purposely-grown crops in South Africa is sizeable, only a fraction of those will be economical to produce. There is a clear need to better understand a more diversified feedstock base, including non-cultivated feedstocks (such as solaris and A-molasses) that will become increasingly relevant with the growing adverse effects of climate change on agricultural output," he continued.

Invasive alien plants (IAPs) – water-thirsty trees and plants such as eucalyptus and pine trees that have a negative impact on biodiversity – were also found to be of particular interest as a potential feedstock. They are thought to cover more than 10% of South Africa's land mass and use up to 6% of the country's fresh water.

"The removal of some of these IAPs, which grow rapidly, is already mandated within some South African regions, but often this biomass source is underutilised. Linking these plants to SAF production represents a significant opportunity," said Chireshe.

Production infrastructure is another challenge that must be addressed if the continent is to leverage its potential for SAF production. There



Possibilities: A clearing team operating in the Vyeboom wetland aims to use waste biomass to produce SAF in South Africa.

PICTURE: WWF/ RODNEY FEBRUARY.

Pacific regions, Neste has yet to partner with any airports in Africa on SAF supply.

"We did supply EgyptAir with SAF prior to the COP27 climate conference in Sharm El Sheikh and we are working alongside airlines, including Emirates and Etihad, on supplying SAF to carriers in the Middle East," continued Wood.

One solution that could help boost SAF demand in Africa in the near term is book-and-claim. Jet Aviation has partnered with SkyNRG to ensure that, when SAF is not physically available, any customer who wants to is able to purchase SAF through the supply chain and contribute to sustainable aviation. "We remain committed to providing SAF wherever physically available, but our worldwide book-and-claim service broadens access to it, while avoiding the need to physically transport it," said Paddock.

Air BP, which currently operates at more than 20 locations in Africa, has, to date, supplied SAF at more than 30 locations (in Europe and North America). It also offers a book-and-claim programme, but only for specific locations, none of which are currently in Africa.



Laura Bowden, Air BP's global marketing manager, explained it comes back to demand. "To operate book-and-claim in a country there has to be demand because there is an investment in time, logistics and legal procedures to do so," she said.

To scale up demand for SAF, either through book-and-claim or a physical supply, "blending mandates, alongside other regulatory measures, including incentives to bridge the gap with conventional jet fuel, will be key to increasing SAF supply and stimulating demand in Africa", she reiterated.

While blending mandates are welcomed, Air bp is also calling for the implementation of mass balancing centres, from which SAF can be delivered into select air transport hubs, to decrease the regulatory cost burden and simplify logistics, rather than SAF being available at all airports.

"Increasing SAF supply shouldn't be about how much of the fuel is being delivered into a particular airport or aircraft. Ultimately, it should come down to how much SAF is replacing conventional fossil fuel overall, and ensuring SAF is delivered as efficiently as possible and with minimal carbon emissions," Bowden concluded.

are currently no SAF production plants on the continent.

"The obvious solution here is to use existing refineries that could be repurposed for SAF production," said Chireshe. Local fuel producer, Sasol, is currently exploring the logistics of this with two of its existing refineries.

The challenge with SAF production and supply is not unique to Africa, claims business aviation services provider Jet Aviation's president, David Paddock. "Ultimately, on a global scale, we need more companies, industries and governments to come together and match current future requirements to ensure all relevant infrastructure can be provided and turn SAF into a global reality," he said.

"There is no one quick solution to SAF supply challenges but emphasising closer collaboration from multiple stakeholders is one way to start," he continued.

Neste's vice president EMEA, renewable aviation, Jonathan Wood, agrees. "The market for SAF is in its early stages of commercialisation and the major challenges are both ramping up production and finding customers willing to pay the extra cost versus fossil fuel for the emission benefits," he said.

As a producer of SAF with a current production capacity of 100,000 tonnes per annum, Neste plans to increase its production capacity 15-fold (to 1.5 million tonnes). However, with its focus currently on Europe, the Americas and Asia-

SABCA MISE SUR L'ÉCOSYSTÈME AÉRONAUTIQUE MAROCAIN

L'attractivité, la compétitivité et l'expertise de la plateforme aéronautique marocaine ont été mises en lumière en marge de la première édition de l'Aerospace African Forum tenu à Casablanca en février dernier. Cap sur la nouvelle usine de la société belge Sabca dans la zone industrielle de Nouaceur avec **Anuradha Deenapanray Chappard**.



L'inauguration de Sabca Maroc.
IMAGE: MINISTÈRE DE L'INDUSTRIE ET DU COMMERCE DU MAROC.

Sabca (Société anonyme belge de constructions aéronautiques) est présente au Maroc depuis 2012. Elle fait partie du groupe belge Orizio qui possède également des compétences dans la maintenance militaire et civile avec Sabena Engineering. Sabca Maroc a inauguré fin 2022 sa nouvelle usine de production et d'assemblage de pièces pour l'aviation à la suite de la signature d'un contrat avec le constructeur suisse Pilatus. Il portait notamment sur l'assemblage des aérostructures du PC-12. Les avantages de la plateforme aéronautique du Maroc, que ce soit en termes de logistique, de « time zone », de compétitivité et de compétences, ont été des facteurs déterminants.

SUMMARY

SABCA STRENGTHENS ITS ACTIVITIES IN MOROCCO

After a decade of presence in Morocco, Sabca which is part of the Belgian Orizio Group, has inaugurated a 16,000 sq.m. factory in the industrial zone of Nouaceur that houses a Pilatus PC-12 aerostructure assembly line. It carried out the celebration during the first Aerospace African Forum held in Casablanca. Sabca Morocco has invested more than \$19 million in the plant that has 300 employees and is developing new skills. "It took us less than a year to build this new site. We have been able to benefit from the policy of the Moroccan authorities, GIMAS and IMA to promote and develop the country's aeronautical ecosystem", said Raphael Samson, Director of Sabca Morocco. "It's vital for our development. Without this new production unit in Morocco, we would not have been able to face our competitors on tenders like the one launched by Pilatus."

« Nous avons mis moins d'une année pour construire ce nouveau site. Nous avons pu bénéficier de la politique favorisant le développement de l'écosystème aéronautique avec le support des autorités marocaines, du GIMAS et de l'Institut des Métiers de l'Aéronautique (IMA) », affirme Raphael Samson, directeur de Sabca Maroc. « C'est essentiel pour se développer. Sans cette nouvelle unité de production au Maroc, nous n'aurions pas pu rivaliser avec nos concurrents sur des appels d'offres comme celui lancé par Pilatus. »



D'une superficie de 16000m2, ce site a bénéficié d'un investissement de 18 millions d'euros de Sabca Maroc. Il compte aujourd'hui 300 salariés, contre 50 en 2020. En plus de Pilatus, Sabca Maroc travaille avec de grands groupes internationaux comme Airbus, Daher et Dassault Aviation.

L'usine du Maroc tourne aujourd'hui à plein régime pour accompagner la reprise du transport aérien. « Nous suivons la forte augmentation des cadences de production de nos clients », souligne Raphael Samson. « Le recrutement se poursuit également grâce à l'IMA qui soutient nos lignes de production. » Côté maintenance, Sabena Engineering développe aujourd'hui un centre de maintenance sur l'aéroport de Benslimane. Un accord a été conclu avec les autorités marocaines pour la mise en œuvre d'un partenariat stratégique pour fournir des services de maintenance, de réparation et de renouvellement d'avions aux Forces armées royales et d'autres clients dans la région. Maintenance Aero Maroc (MAM) a pour vocation la maintenance des avions militaires à commencer par le C-130. Il a également pour ambition de faire des opérations de MCO sur le F-16 de Lockheed Martin. ▲

The company also works with major international groups such as Airbus, Daher and Dassault Aviation. The Moroccan installation is running at full capacity to support the resumption of air transport and the ramping up of its customers' production. Elsewhere Sabena Engineering is setting up a maintenance centre at Benslimane Airport. An agreement has been reached with the Moroccan authorities for the implementation of a strategic partnership to provide aircraft maintenance, repair and renewal services to the Royal Armed Forces and other customers in the region. Maintenance Aero Maroc (MAM) will maintain military aircraft, starting with the C-130. It also aims to make MCO operations on Lockheed Martin's F-16. ▲



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Wouldn't you rather plan with us?

Keith Mwanalushi speaks to Sydney Hapenga at Int'Air Iles in The Comoros Island discussing how quality assurance and safety play a key role especially for inter-island operations.

Calculating the risks brings reward

Safety and quality management is essential for aviation operators and at Int'Air Iles, the quality assurance and safety teams are responsible for ensuring compliance with all aspects of the airline's operations to comply with applicable regulations and standards, including those related to maintenance, training, and operations.

The airline operates a C208B Grand Caravan (D6-NOE) and one Let 410 LVP (OK-LRA), from its base at Ouani Airport, Anjouan serving local island routes within The Comoros.

Sydney Hapenga, director of quality assurance, safety and security at Int'Air Iles said that mitigating risk was a major task for the airline while considering a range of risks, from mechanical failures to weather-related disruptions. So, the quality assurance and safety teams are challenged to identify potential risks and develop strategies to mitigate them.



"One of the primary roles is accident prevention which includes developing safety protocols and procedures, conducting regular safety audits, and investigating incidents to determine their root causes, analysis of data on airline operations to identify areas for improvement," said Hapenga. Additionally, his team also work to implement changes that can reduce risk, enhance safety, and improve operational efficiency. "We are mandated to ensure that customers have a positive experience when flying with the airline and this includes monitoring customer feedback and addressing any issues that arise," he added.

Hapenga has observed some specific challenges with quality assurance and safety implementation systems locally. Despite its small size, the airline must comply with a range of regulations and standards related to safety and quality assurance to ensure compliance which requires significant resources and expertise.

He said continuous training of personnel has proved to be expensive particularly for an airline with limited resources. "Resistance to change, implementation of new

Implementation of new processes within the existing processes and procedures is often met with resistance from personnel who are used to doing things a certain way. SYDNEY HAPENGA

processes within the existing processes and procedures is often met with resistance from personnel who are used to doing things a certain way," he noted.

Quality assurance and safety systems are complex therefore involving multiple processes and stakeholders, so coordinating these processes and ensuring effective communication between stakeholders can be a challenge, he stressed. "Human error still occurs, we have always ensured that personnel are properly trained and equipped to follow safety protocols and procedures, because it is critical in minimising the risk of human error. Implementing a quality assurance and safety system also requires careful planning, investment, and ongoing effort to ensure that the system remains effective over time," he said.

Hapenga is also keen on leveraging technology in the quality assurance and safety process, and he said the airline is using technology to collect vast amounts of data on operations, flight data to maintenance records which when analysed, identifies trends and potential risks enabling the airline to take proactive measures to mitigate them. "We are able to automate inspections of aircraft and other equipment, reducing the potential for human error and improving the accuracy and efficiency of inspections," he said. ▲



Sydney Hapenga: Focus on quality and safety at Int'Air Iles. PICTURE: INT'AIR ILES

SOMMAIRE

PRIORISER LA QUALITÉ ET LA SÉCURITÉ

Keith Mwanalushi s'est entretenu avec Sydney Hapenga sur le rôle majeur de la qualité et de la sécurité chez Int'Air Iles des Comores, en particulier pour les opérations inter-îles.

Les équipes en charge de la qualité et de la sécurité doivent assurer la conformité de tous les aspects des opérations aériennes pour respecter les réglementations et normes applicables, y compris celles liées à la maintenance et à la formation.

Selon Sydney Hapenga, directeur de la qualité, de la sûreté et de la sécurité chez Int'Air Iles, l'atténuation des risques est essentielle pour la compagnie aérienne, tout en tenant compte d'une série de risques, allant des défaillances mécaniques aux perturbations liées

aux conditions météorologiques. La compagnie s'appuie ainsi sur des protocoles et des procédures de sécurité, des audits réguliers, des enquêtes, la formation, la communication et les nouvelles technologies dont l'automatisation pour réduire les risques, améliorer la sécurité et l'efficacité opérationnelle.

La compagnie aérienne exploite un C208B Grand Caravan (D6-NOE) et un Let 410 LVP (OK-LRA), à partir de sa base à l'Aéroport d'Ouani, à Anjouan. Elle dessert les routes intérieures des Comores. ▲

The South African National Space Agency (SANSA) has become a world class resource for aviation and space missions. SANSA is now supporting projects as diverse as the first Arab moon landing, to monitoring water resources. Guy Leitch reports.

SANSA'S MISSION: TO KEEP A WEATHER EYE ON PHENOMENA

SANSA's space weather capability has been developed in response to the International Civil Aviation Organisation (ICAO) 2021 selection of SANSA as one of two ICAO-designated regional space weather centres.

This designation required that a full operational capability, that meets the ICAO requirements, needed to be in place by 2024 to provide advanced research capabilities in space weather. SANSA's regional centre provides space weather services, including solar storm forecasts and warnings to the global aviation sector.

SANSA has been operating a space weather centre for the past 12 years in Hermanus in the Western Cape. It has worked on monitoring the sun and its activity, and providing space weather forecasts, warnings, alerts and environmental data on space weather conditions, all of which are critical to aviation safety.

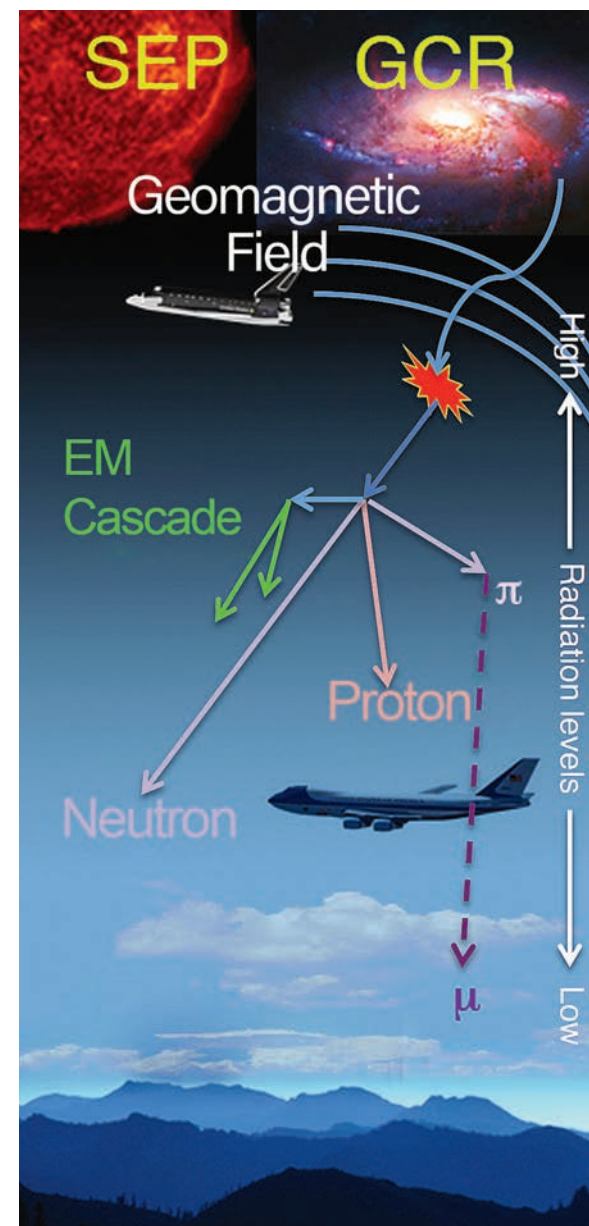


Space weather can interfere with satellite electronics, communications and GPS signals, amongst other things. With the growing need to monitor space weather, SANSA is a member of the International Space Environment Service and contributed this service as the Regional Warning Centre for space weather in Africa.

Of note is SANSA forecasting the G4 magnetic sun storms that disrupted aviation worldwide in March 2023. To enable data and resource gathering, SANSA is requesting all pilots and others involved in aviation to provide feedback on any space weather phenomena they encounter – and specifically how it affects their flights.

Email: spacesci-info@sansa.org.za. SANSA provides other essential services to aviation. Of note is the agency's magnetic capability. Compasses are still an essential component of aircraft navigation equipment. Electrical systems may fail, but the Earth's magnetic field abides. However, it is continuously changing, and that requires constant monitoring to determine the degree of compass variation at any specific place.

A proper compass swing procedure is necessary to determine how to compensate for the



Solar radiation has a direct effect on aircraft. PICTURE: SANSA

magnetic field of the actual aircraft, which will cause a deviation to the compass reading, due to the proximity of magnetised steel or iron components in the aircraft structure, and by the effects of current flowing in nearby electrical circuits.

A properly conducted compass swing requires a reference compass calibrated by SANSA, which the agency does in a magnetically-clean environment – free of steel structures, underground cables, or equipment that produces magnetic fields – to assure it is free of interference.

Another and related key magnetic capability is SANSA's annually-produced Geo Magnetic Map. The Earth's magnetic poles are continuously moving with consequent changes in magnetic variation. Globally, maps of variation are only updated every five years, but SANSA is updating the Geo Magnetic map every year.



SANSA also has a key role in international space cooperation. For example, SANSA supported the Mohammed Bin Rashid Space Centre's attempt to land their Rashid Rover on the Moon on 25 April 2023. The Rashid Rover is the first Lunar mission by the United Arab Emirates' and was launched by a SpaceX Falcon 9 rocket from the Kennedy Space Center in Florida on 11 December 2022.

SANSA's Hartebeeshoek Ground Station was equipped to provide direct communication between the Rashid Rover and the ELM Control Centre, which is located at MBRSC facilities in Dubai, from when the Rover landed on the moon's surface. To track and communicate with the spacecraft, SANSA provided two antennae – a 12-meter S-band antenna for uplink transmissions and a 26-meter parabolic antenna for downlink transmissions. (Unfortunately the actual landing was not successful and the Rover did not communicate with the Earth stations).

SANSA is also working with NASA to establish a deep space tracking and telemetry station in Matjiesfontein in support of future lunar exploration on the Moon. ▲

▲ ALL IN A DAY

Sa'ad Sa'id Sa'ad

Marcelle Nethersole speaks to the Caliphate Aviation general manager.

What does Caliphate Aviation do and where is it based?

We are a subsidiary of Caliphate Aviation Handling Services, an aviation service provider/consultancy company with a well-equipped training centre designed to offer various aviation technical and management-related courses.

Our training centre is based in Kano, Nigeria. Kano is the commercial centre of northern Nigeria and the most populated state. Historically, it was the first state to witness the first aircraft landing in Nigeria in 1925 and still stands as a transit stop for thousands of passengers connecting to various international destinations around the world.

Can you tell us about the training Caliphate offers and give us an example?

We are trying our best to guide the government that is sponsoring students to study in different fields of aviation and other self-sponsored individuals in choosing the most appropriate and industrially-needed courses in the aviation industry. In 2010, the Kano state government sponsored 100 students on a scholarship to the Mid-East Aviation Academy in Jordan for flight training.

After spending approximately \$6.7 million dollars, most of the students ended up without a job upon returning home to Nigeria because the industry couldn't support them or provide them with a job.

We see the need to work hand in hand with the government to see a proper spread across all fields of the aviation industry next time.

Are there any challenges the company faces?

Nigeria, being the most populated country on the continent of Africa has always been a country full of energy and lots of activities even though it was affected by the pandemic. But things are still taking shape.

The most important thing to note is the amount of commitment being put in place knowing fully your destination.

We do work closely with the government. Recently, we signed an MOU with the Nigerian College of Aviation Technology Zaria. We also work closely with the department in charge of training at the Nigerian Civil Aviation Authority.



PICTURE: CALIPHATE AVIATION

“The most interesting aspect of all is when you engage the energetic and vibrant young minds, listening to their brilliant ideas.”

How does the company encourage the youth in aviation?

With the ever-increasing population in Nigeria and the increasing demand for air transportation, we were able to organise a kids and youth aviation programme.

This involves classroom lessons for kids and lectures for youth on aviation with the help of visual aid, pictures presented via slide shows, tour visits to the airport, and industrial training, which will give students the opportunity to experience the working environment.

Recently, the school acquired a B747-200 cockpit for students to have a look at, even though it is outdated for modern aircraft has taken over due to advancements in technology. We are also writing to Boeing on its Education Resource programme for preparing the next generation of aviators.

What is next for Caliphate Aviation?

We are working towards having a strong technical partner that will work with us towards establishing a full-blown aviation school that will be the first of its kind in the region.

Nigeria is projected to be the third most populated country by 2050; this is a good opportunity for anyone hoping to tap into this market and becoming part of the next generation of aviators in Africa.

With the newly sworn-in government both at the federal and state levels, we will be working with the government at all levels towards youth empowerment and training in aviation.

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

I make sure every unit or department is working right on track towards achieving the organisation's objectives.

The most interesting aspect of all is when you engage the energetic and vibrant young minds, listening to their brilliant ideas, on how aviation can be used as a major driver to move the economy by creating thousands of jobs through tourism, agriculture, banking, manufacturing and many more.

This all makes me see a promising future in aviation and determination that these young individuals are ready to take up their position not only in Nigeria and the continent of Africa but on the global stage.

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