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DE ROUTE VERS LE SUCCÈS »

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COVER:
Allan Kilavuka, CEO of Kenya Airways, discusses the airline's strategy to emerge from the Covid pandemic that focuses around resizing, collaboration, and buying into the drive for sustainability.
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TIME TO MAKE THINGS HAPPEN FOR AFRICA

How the African aviation industry can encourage new thinking and change among its governments and, indeed, its colleagues, remains the largest of conundrums challenging us.

Covid-19 has had a massive impact on any progress being made.

According to the African Civil Aviation Commission (AFCAC) at May's African Airlines Association (AFRAA) Stakeholders Convention, the number of unique city pairs connecting Africa within the region and to the rest of the world reduced to less than 100 in April 2020, compared to about 970 during the same period a year earlier.

And the continent has been slow to drive revival.

There is increasing frustration among Africa's airlines that they are being held back by high costs imposed on them by governments. Fuel is up to 40% more expensive than elsewhere in the world, and there are continued restrictions on routes.

Other problems include attitudes that welcome foreign carriers rather than neighbouring African ones, restrictive visa issues to allow free movement, and the unequal pace in the implementation of liberalisation measures, even between the countries that have committed to the single African air transport market (SAATM).

Access to finance – and indeed a nervousness from investors – is another challenge.

We have seen successful airlines like Comair cease operations from lack of funding, and a myriad of ventures in west Africa stalling.

In this issue, Allan Kilavuka, CEO of Kenya Airways, outlines why he believes consolidation is the only answer to survival and then success.

He could be right. He quotes the IAG model, where airlines like British Airways, Iberia, and Aer Lingus, retain national identities but share the advantage of economies of scale. The time of ego-airways has surely passed.

Both Boeing and Airbus have put numbers behind the growth potential of the continent, but recognise there are threats.

One is the human capital issue. We see in this issue how Kenyan pilots are becoming disenchanted with their lot. With a global shortage of crew now upon us, operators playing on the misfortune of recruits encumbered by huge training debts and working for less than an intern or an Uber driver, is scandalous.

The airline industry should look at itself before it is too late and we exhaust the supply of next-generation aviators.

Alan Peaford, editor-in-chief

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F REPORTAGE EN FRANÇAIS

EgyptAir unveils new 90th anniversary livery

EgyptAir celebrated its 90th anniversary in May with a new livery.

The company was established on May 7, 1932, to be the first operating airline in the Middle East and Africa and the seventh airline in the world.

Starting its operation under the name of "Misr Airwork" in 1932 until 1941, it was renamed as MisrAir until 1960, before it was rebranded as the United Arab Airlines following the establishment of the United Arab Republic between Egypt and Syria.

Since then, it has been named as EgyptAir.



FAAN zoned for IT upgrades

With the commissioning of new IT systems now complete at both Lagos and Abuja airports, the next Nigerian facilities to receive the upgrades will be Port Harcourt, Kano and Enugu.

Lawal Abdhullahi, operations officer at the Federal Airports Authority of Nigeria (FAAN), said: "We wanted to renew the IT infrastructure of our airports to guarantee a level of service to passengers and airlines capable of handling the growth of both domestic and international traffic."

"French company RESA's selection was based not only on the performance of its systems and the financial competitiveness of its offer, but also on its ability to work as a team with FAAN in transferring operational know-how to local staff."

Pharma boost

EgyptAir Cargo has achieved the International Air Transport Association (IATA) CEIV Pharma certification, which ensures that, when transporting temperature-sensitive

pharmaceutical products, companies meet the regulatory requirements, benchmark their activities towards international, national as well as IATA requirements, while mitigating the impact and the risks.

DRC suspends RwandAir flights

The Democratic Republic of the Congo has suspended RwandAir flights in response to what it claimed was Kigali's support for M23 rebels carrying out a

military offensive in its eastern province of North Kivu.

Rwanda has denied supporting the rebels and RwandAir has cancelled all flights to Kinshasa, Lubumbashi, and Goma until further notice.

Embraer's freight move

The International Air Transport Association (IATA) reports that African airlines saw cargo volumes increase by 4.6% in February 2022 compared to

the same month in 2021, with capacity up by 8.2%.

Embraer's response to the anticipated demand for freighter capacity is its recently launched passenger-to-freighter (P2F) conversion programme for the E190 and E195 jets.

According to Embraer, the E-Jet freighter will have more than 50% additional volume capacity, three times the range of large cargo turboprops, and up to 30% lower operating costs than narrow-bodies.

Air Belgium expands in Africa

Air Belgium will launch new routes between Brussels Airport and South Africa next September. It is the airline's second destination in the Indian Ocean after Mauritius. Johannesburg and Cape Town will be the first destinations for Air Belgium on continental Africa.

Bamako bound

French airline, Corsair, will resume its seasonal services to Bamako from Paris Orly this summer until September 18.

Flights will operate three times a week using Airbus A330-300 aircraft.

RJ in full compliance

Royal Jordanian (RJ) has renewed its International Air Transport Association (IATA) operational safety audit (IOSA) registration for 2022.

CEO, Samer Majali, said: "Obtaining the IOSA registration is proof of RJ's continued work to comply with air safety standards and adherence to international practices."



Angola goes for Airbus C295s

Angola has ordered three Airbus C295s, two specifically equipped for maritime surveillance and one for transport missions.

The transport mission aircraft will be able to carry out tactical cargo and troop transport tasks, load dropping or humanitarian missions.

The maritime surveillance aircraft will play a key role in search-and-rescue, control of illegal fishing and borders, support in case of natural disasters, and intelligence-gathering missions.

They will be equipped with the Airbus-developed fully integrated tactical system (FITS), as well as state-of-the-art sensors.

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South Africa on tour with Emirates

The South African Tourism Board has signed a memorandum of understanding (MoU) with Emirates Airline to jointly promote tourism and boost visitor arrivals and in-bound traffic to South Africa from key markets across the Emirates network.

Minister of Tourism in South Africa, Lindiwe Sisulu, welcomed the signing, saying: "We want to continue ensuring ease of access into South Africa for Middle Eastern travellers and this collaboration will assist us in elevating our trade efforts in terms of packaging the destination."

"We look forward to welcoming more travellers from the Middle East to experience our family friendly accommodation establishments and activities, a diverse offering of cuisine, as well as wildlife and safaris."

Start-up's first aircraft

Nigerian start-up airline, ValueJet, has taken delivery of its first two aircraft. The CRJ900s previously served with Spanish regional carrier, Air Nostrum.

ValueJet managing director, Omololu Majekodunmi, said: "This is one of many defining steps. We will deploy these aircraft for regional flight services once we have completed all mandatory processes and secured our



Set for modernisation: Amilcar Cabral International Airport. PICTURE: WIKIPEDIA.

Cape Verde airports modernisation boost

Cape Verde is preparing an infrastructure boost as part of its post-pandemic plans for air transport recovery, with modernisation of its international airport and improvements across the country's secondary island airports.

The Cape Verde Government has signed a contract with French operator, Vinci, and awarded a public airport service concession.

The deal includes concessions at Amilcar Cabral International Airport on the island of Sal; Praia International Airport – Nelson Mandela, on the island of Santiago; Cesária Évora International Airport, on São Vicente Island; Aristides Pereira International Airport, on Boa Vista Island; Preguiça Airport, on São Nicolau Island; and at Maio Airport and São Filipe Airport, on Fogo Island.

The airport company across Cape Verde is said to have lost a cumulative \$28.5 million over the past two years.

air operator's certificate (AOC) approvals."

Caging the drones

Fahari Aviation, a subsidiary of Kenya Airways, has launched the first drone enclosure in Kenya. The facility, known as the Fahari drone cage, will be used for training and the testing of drones and equipment.

Through the construction of the cage, Fahari Aviation is positioning itself at the forefront of exploring advanced future technologies in aviation and, at the same time, promoting safe and secure usage of uncrewed aerial systems (UAS) in Kenya.

Fahari Aviation is

responsible for launching and implementing future aviation technologies and is part of the airline's strategy of contributing to the sustainable development of Africa by championing new dimensions within the industry with the use of drones and uncrewed aircraft.

CRJs for CemAir

Specialist regional aircraft lessor, TrueNoord, has successfully remarketed two Bombardier CRJ900 ER NextGen aircraft to South African operator, CemAir.

CemAir has signed long-term operating leases for both regional jets.

The aircraft will be based in Johannesburg at OR Tambo International

Airport and will complement CemAir's existing fleet of 22 regional jets and turboprops deployed on domestic and regional routes that service popular tourist destinations and important commercial centres.

Sustainable flight

Kenya's National carrier, Kenya Airways, has demonstrated the future of sustainable aviation by flying an environmentally sustainable B787-800 Dreamliner from Nairobi to Amsterdam. The flight was part of the sustainable flight challenge (TSFC) that brought together 16 SkyTeam Alliance member airlines.

■ Allan holds the key, page 8.

Aviaman top in Africa

Mauritius-based communication and dispatch centre, Aviaman, has been named African supplier of the year in the UAS International Trip Support Awards for 2020-21. The announcement was made during the recent European Business Aviation Convention & Exhibition (EBACE) event in Geneva.

Award recipient selection is based on client satisfaction reports instigated by the UAS sales support department.

No place like Lomé

Ethiopian Airlines has begun a thrice-weekly passenger service to Washington DC via Lomé, Togo. This increases the frequency of Ethiopian Airlines' flights to Washington DC to 10 from the existing seven weekly flights it operates via Dublin.

HiFly solution

TAAG Angola Airlines has signed an ACMI (wet lease) agreement with HiFly to operate an Airbus A330 on the Luanda-Lisbon-Luanda route for three months.

TAAG said: "This decision is aligned with the ongoing maintenance on our Boeing 777-300 ER model. This strategy allows the continuity of the Luanda-Lisbon connection."

Islands deal

STP Airways, the national airline of São Tomé and Príncipe, has signed a wet lease contract with Portugal's regional operator, Sevenair, to operate flights between the country's islands.



PICTURE: BOEING.

Ethiopian orders five new freighters

Ethiopian Airlines has announced an order for five Boeing 777 Freighters.

"While cementing our partnership with Boeing with new orders, the growth of our freighter fleet takes the capacity and efficiency of our shipment service to the next level," said Ethiopian Airlines Group CEO, Mesfin Tasew.

He added: "We always strive to serve our customers with the latest technology aircraft the aviation industry can offer. Our cargo terminal is Africa's largest and, coupled with fuel-efficient freighters and well-trained cargo-handling professionals, will enable our customers to get the best quality shipment service."

"Customers can rely on Ethiopian for wide-ranging cargo services across five continents." ■ Tasew's double vision, page 14; Pillar talk, page 38.

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AIRBUS

Kenya Airways (KQ) has a solid strategy for emergence from the Covid pandemic that focuses around resizing, collaboration, and buying into the drive for sustainability. CEO, Allan Kilavuka, talked to Alan Peaford about his plans.

I have been fortunate enough to have known Allan Kilavuka for some years and have always been enthused by his youthful drive and passion.

When he moved from the Kenyan low-cost carrier, Jambojet, to take up the acting CEO role at the national carrier, I worried that some of that optimism and drive might become blunted. I was wrong.

Kilavuka positively bounded into the hotel boardroom on the sidelines of the African Airlines Association (AFRAA) stakeholders convention.

As official 'host' of the event, he had already been heavily engaged in welcome speeches and greeting airlines and officials to the meeting; on the eve of the show he had hosted an event for youngsters to encourage them to look at science, technology, engineering and mathematics (STEM) subjects and potential careers with the Kenyan national carrier.

Like all African airline leaders, Kilavuka suffered during the Covid-19 pandemic. As the industry shut down, KQ found itself faced with leasing fees for its modernised fleet.

"In 2019, we had a record year flying 5.1 million people but, in 2020, it dropped to 1.8 million. We had a great first quarter and then stopped flying for six months," Kilavuka explained.

"Last year we increased to 2.5 million passengers and improved our losses by 56%. How did we do that? Mainly, of course, we flew more. But, more importantly, we had special rates that we paid with our lessors."

Continued
on Page 10

Allan Kilavuka:
"Sometimes people
tell me I'm running
too quickly ahead
of everybody else."

PICTURE: KO.

ALLAN HOLDS THE KEY...

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CONTINUED FROM PAGE 8

For 2022, the leasing companies wanted to revert to the old rates, but KQ kicked back. “They’re not happy but we’re saying, ‘Listen, what we’re getting from government in funding is conditional on reducing costs’. And this is very important. If we don’t reduce costs, overall, the government will stop funding us, because we need to demonstrate that the restructuring is sustainable.

“And, as long as we have a high-cost base, it’s not going to be sustainable. We need to demonstrate that we are reducing our costs and that we have a sustainable model where we’ll be self-sufficient from 2024,” he said.

The strategy has worked, with a further \$170million is government funding, which Kilavuka confirms is a loan. The airline will be restructuring further, cutting the fleet and destinations. But he is determined that KQ will not only survive, but also strengthen its position as a leading airline across the continent.

Cost-cutting is not easy when so much – fuel, navigation and airport fees, and, in many cases, leasing contracts – are outside of the airline’s control.

“Of course it is very difficult,” Kilavuka agreed. “Navigation fees are imposed on us by 200 governments around the world, but there are cases where you can negotiate on landing at airports. You can have a discussion and they can give some concessions, but these are limited; you will probably get 5% here and there.

“But what we’re talking about is how to reduce distribution costs, and employment costs, which is another difficult one.

“You have a structure that says 45% of your cost is pilots, 20% is management, and the rest is all other employees. So is that the right mix? And then how can you make pilots and cabin crew more productive and efficient? We need to use the same numbers for more flights, and generate more income.”

Kilavuka has long been an advocate for greater consolidation among African airlines. The continent needs a period of consolidation if it is to overcome its connectivity challenges, he said at a recent event in the UK.

He argued that the fragmented nature of the sector is due to protectionist measures and is stifling economic growth in the region.

I asked him how many airlines the continent should have. “We probably wouldn’t bring it down to one,” he said with a smile. “I suspect you’re probably looking at about five or six.”

Kilavuka insists the airlines have to be sustainable. “My thinking is that you do need competition. But, if you look at Europe, they have three big airline groups, along with the low-cost carriers like Ryanair, and so on.

“But I’m talking about legacy full-service carriers. In Europe there are three groups, and that’s what I’m thinking about here, saying, why don’t we have three groups? We have a smaller market than Europe.”

Kilavuka has already taken the first step with a



Allan Kilavuka:
“How can you
make pilots and
cabin crew more
productive and
efficient?”
PICTURE: KQ.

plan that carries the working title ‘Pan-African Airways’. In a much-publicised move, KQ and South African Airways (SAA) are to come together to get the project under way.

“It begins with one step. Let’s say South Africa, Kenya. Let’s prove this. Let’s do this. Other airlines are waiting in the wings to see if this make sense? And if it does, they join us,” said Kilavuka.

Like many African projects, there is some cynicism about the speed at which change will happen and what barriers – particularly regulatory – may get in the way.

“I’m so bullish about it. But sometimes people tell me, I’m running too quickly ahead of everybody else. For me, it’s such a no-brainer that I kind of get ahead of myself,” said Kilavuka.

“The concept has been approved by the two governments and we have signed a partnership agreement that clearly stipulates the roadmap, and talks of 2023 as to when we’re going to set up this group.

“Is it easy? Absolutely not! It’s going to be extremely difficult for us to do this. But nothing good comes easy. And I think it’s not just a good thing to do; it is so necessary. I think that it’s going to be very difficult for African airlines to survive without this kind of an arrangement.

“The alternative is pumping in billions of dollars to prop up airlines. We’re going to face a lot of roadblocks, a lot of naysayers, but we’ve got to do it.”

Kilavuka envisages a model along the lines of IAG in Europe (owners of Iberian, British Airways, Aer Lingus etc).

“I love that model,” he said. “I think it will work perfectly for Africa. SAA will continue flying as South African; we will continue flying as Kenya Airways; anybody else who joins us will continue flying with their own identity. But the scheduling, the network, will be coordinated and synchronised to make sense. And then, when you look at the common activities, operational activities, they have to be coordinated, so that we have economies of scale.

“When you talk about aircraft purchasing, for example, it has to be coordinated. Or group-

level strategies for growth, how do you grow? Who are you partnering with outside the group and so on?

“The advantage we have with South Africa and Kenya is that there are two of the busiest hubs in Africa and they are apart from each other, so they complement each other.”

There are talks with other airlines and Kilavuka says west Africa is particularly interesting to the pan-African group.

Kilavuka has many concerns about the future of African aviation – primarily because of the charges. He proved with Jambojet that you can stimulate domestic traffic, but high charges for flights that link close neighbours dampen that opportunity.

“Take east Africa, for example,” he said. “People bus from Kampala and spend 12 hours on the road to Nairobi. It would make so much more sense to go by air. There is absolutely no reason why we cannot domesticate our travel in this region. If you really think about it, we speak the same language – Swahili – and we still trade, despite the charges.”

Infrastructure needs improving with additional runways, and a new attitude towards aviation needs to be embraced.

“We need to demystify flying and get people excited about this industry,” he said. “It is such a huge catalyst to economic development. We must make it less onerous.”

Kenya Airways has been developing relationships with education and also encouraging innovation and entrepreneurship at the ‘pride centre’ at its headquarters.

“We are seeing hundreds of great ideas. This is our future,” said Kilavuka.

With plans for electric vertical take-off and landing vehicles (eVTOL) air taxis as part of the fleet, consolidation to increase pan-African trade, KQ being Africa’s first airline to embrace sustainability with a 787 flight to Amsterdam, and a demonstration that he is not frightened to make tough decisions, it is no wonder that Kilavuka has been named as one of Africa’s top leaders. ▲

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Julie Dickerson

Julie Dickerson
Chief Executive Officer

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Keith Mwanalushi looks at African low-cost carrier (LCC) cargo operations following the recent launch of freight services at Jambojet in Kenya.

WORTH THE WEIGHT?



Karanja Ndegwa: "The impact of the pandemic heightened the urgency to go into the market and begin operations."
PICTURE: JAMBOJET.

Multiple LCCs around the world have recently and opportunistically launched air cargo operations as lucrative complements to their core businesses, either as temporary pandemic-era measures or long-term dedicated cargo ventures.

By the time Kenyan LCC, Jambojet, announced its intentions to carry freight in February 2022, cargo capacity by African airlines was 8.2% above February 2021 levels, according to the International Air Transport Association (IATA).

Despite Covid-19 putting LCCs under extreme pressure, Jambojet CEO, Karanja Ndegwa, revealed that cargo operations were a strategic plan even before the pandemic. "By the time it hit we were well into our preliminary preparations. However, the impact of the pandemic heightened the urgency to go into the market and begin operations," he explained.

Before the pandemic, Jambojet flew six Dash 8 aircraft on around 280 flights weekly across the network and each had a cargo hold capacity of 1.2 tonnes – mostly flying empty. "Globally, the demand for cargo intensified, and airlines had to adapt accordingly, especially with the dwindling passenger numbers. This kind of environment puts pressure on LCCs, and airlines in general, to think creatively and increase non-passenger revenues," said Ndegwa.

Some LCCs have previously avoided flying cargo because loading and unloading freight can often disrupt tight turnaround times – at Jambojet this is between 20 minutes to an hour depending on the station.

Ndegwa said the airline has a dedicated ramp operation for each flight and, thus, can load and retrieve cargo quickly. "We also work with cut-off times, ensuring we only accept cargo up to two hours before departure," he added.



Umang Gupta: "Once the industry recovers to some form of post-pandemic status quo, we would expect LCCs to move away from temporary air cargo operations."
PICTURE: ALTON AVIATION CONSULTANCY.

After the signing of a four-part bilateral agreement between Kenya and the DRC in April 2021, Ndegwa reports a tremendous impact on trade between the two countries – including cargo volumes on the airline's services to Goma.

"We expect that, as more traders from both countries discover opportunities, there will be more movement of cargo and passengers. After we launched the direct Nairobi-Goma route, we saw immense potential for trade between the two countries and, so far this year, we have moved more than 15 tonnes of cargo, mainly perishable vegetables and flowers from Kenya."

Jambojet has operated for eight years and, in terms of applying any new regulatory and compliance systems and processes to facilitate cargo operations, the airline has had to update its operations manuals, align its processes, and seek approvals from the regulator, the Kenya Civil Aviation Authority (KCAA).

□□□□□

The carrier also complies with International Civil Aviation Organization (ICAO) regulations on cargo-handling and, because freight operations are slightly different, it also had to ensure all critical staff were trained on the processes.

"We regularly conduct audits to identify operational gaps, if any, and work towards closing them where necessary," Ndegwa said.

Umang Gupta, managing director at global consultancy, Alton Aviation, said LCC involvement in the cargo business either comes in the form of temporary pandemic-era operations to fill a void in demand, or dedicated air cargo operations, where it is measured differently from passenger operations.

"Once the industry recovers to some form of post-pandemic status quo, we would expect LCCs to move away from temporary air cargo operations and focus on their core competencies rather than find ways to work air cargo into their existing passenger-focused models," he believed.

In terms of opportunities, Gupta observed that Jambojet will be capitalising on previously unused capacity within its Dash-8 fleet to provide a value-add service to companies within Kenya, for example transporting fresh seafood from coastal locations to Nairobi.

At the same time, he said the expansion would require additional resources and logistical expertise from the airline, while presenting challenges with optimal scheduling, as important cargo destinations do not necessarily overlap with the most popular passenger routes. ▲



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TASEW'S DOUBLE VISION

"CONSOLIDATION AND GROWTH WILL BE CONDUCTED SIMULTANEOUSLY"

Mesfin Tasew, the new Ethiopian Airlines CEO, is determined to continue registering robust growth and profit. Kaleyesus Bekele reports.

When the legendary former CEO of Ethiopian Airlines Group, Tewolde GebreMariam, stepped down in March after leading the airline for 11 years, many wondered who would take the helm at the largest aviation group in Africa.

A day after GebreMariam's retirement was announced, the board disclosed the appointment of Mesfin Tasew as the new CEO.

Tasew's appointment was not a surprise, as he served the airline as chief operating officer (COO) for more than 10 years under GebreMariam's leadership.

Tasew, who studied electrical engineering at the Addis Ababa University Institute of Technology, has 38 years of experience in airline management and operations. He earned a master's in business administration (MBA) from the Open University in the UK.

In 2021, he was appointed CEO of Asky Airlines, a Togo-based pan-African airline managed by Ethiopian Airlines, which holds a 25% stake in the west African carrier.

Tasew talks humbly but with confidence about the current performance of Ethiopian Airlines. "It remains profitable and has a strong balance sheet," he said.

Like any other international airline, Ethiopian had to navigate through a turbulent time in the wake of the Covid-19 pandemic, but it never halted operation.

There was a time when the airline was forced to ground most of its passenger aircraft at its Addis Ababa Bole International Airport hub.

However, Tasew said the management made a prompt decision to focus on cargo business.

The airline has 12 freight aircraft – ten B777s and two B737-800s. "In addition, we converted 25 passenger aircraft into cargo by

removing the seats and we transported lifesaving medical equipment from China all over the world," said Tasew. "That was a smart and timely decision. Ethiopian was the only airline in the world that was making a profit during that trying time."

The airline also operated charter flights to repatriate stranded citizens of many countries back to their homes.

"We didn't lay off our 17,000 staff. In fact, we made salary increments," said Tasew. "We didn't default on loans and we are still taking deliveries of new aircraft. Though we have not yet got back to the pre-Covid-19 performance level, Ethiopian is still a profitable company."

In 2010, Ethiopian unveiled a 15-year strategy dubbed 'vision 2025' that positioned the airline on a growth trajectory. Prior to the pandemic, the fleet grew from 33 to 130 aircraft, annual passenger numbers from three million to 12 million, and revenue from \$1 billion to \$4.5bn.

The management has now unveiled a revised strategy – 'vision 2035' – under which the airline anticipates growing its fleet to more than 200 aircraft, with aviation group annual revenue of more than \$25bn.

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To meet the vision, ensuring double-digit growth is a major goal, according to Mesfin.

"We have been working on human resource and infrastructure development in addition to increasing efficiency," he explained, adding: "We will handle global (external) pressures so long as we are building our internal capacity."

Ethiopian has been investing in other African airlines including in Togo, Malawi, Mozambique, Zambia and Congo. And, at Addis Ababa, it has made massive investments in MRO, cargo terminal, catering and aviation academy facilities. It has also built a five star hotel near the airport.

Some critics fear that Ethiopian could be over-stretched and face challenges to maintain its steady growth. However, Tasew is confident of continued robust growth and profit.

"Both consolidation and growth will be conducted simultaneously," said Tasew, who went on to confirm that Ethiopian would continue acquiring new aircraft and expanding its MRO centre. The airline is in the process of building two modern maintenance hangars.

Recently, the airline placed an order for five new B777X freighter aircraft. It has also returned its four grounded B737 MAX8 aircraft to service.

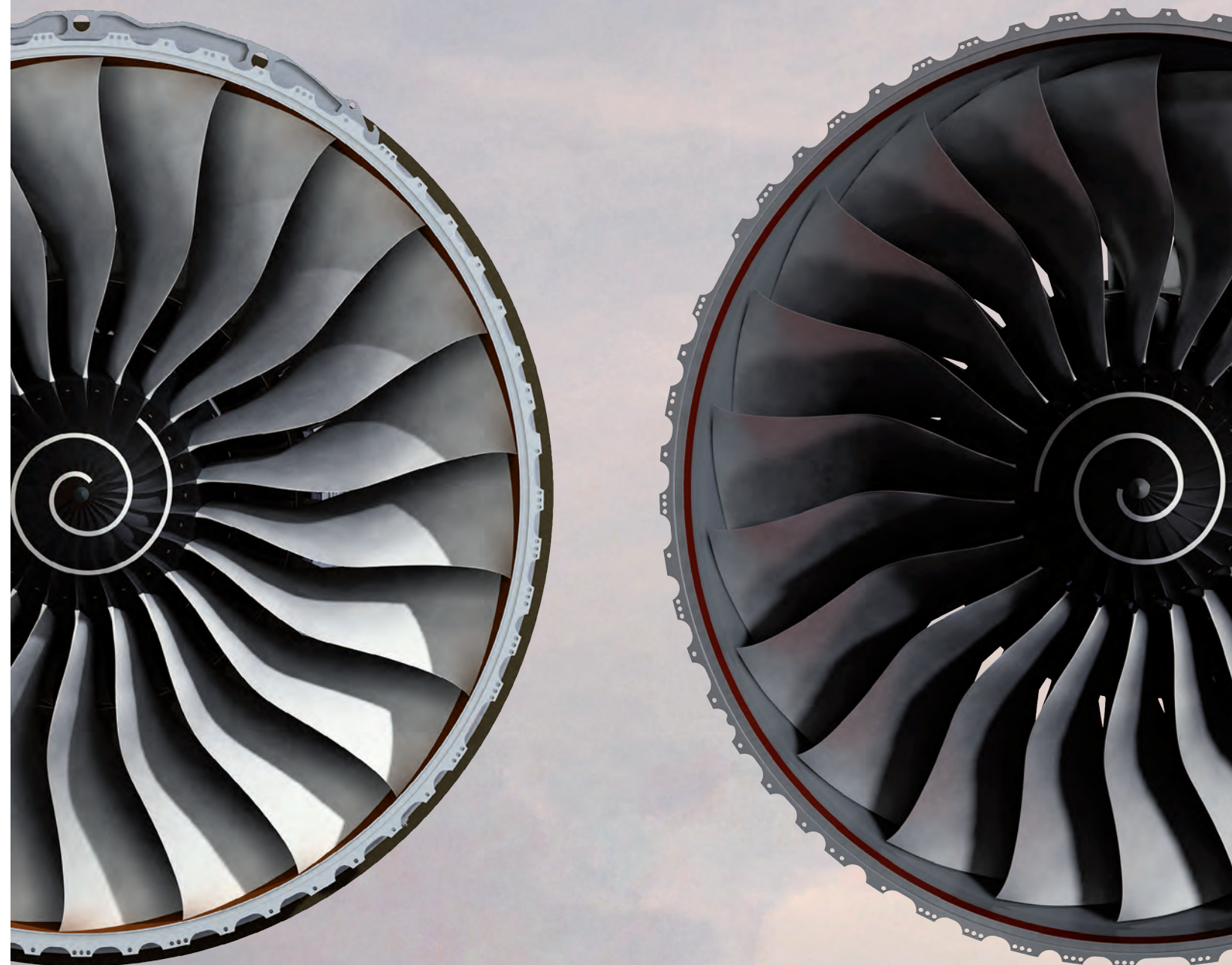
"In collaboration with Boeing, we have done all the necessary required replacement and preparation work. We performed test flights and, after we found out that everything was in order, we returned the aircraft back to the sky," Tasew concluded. ▲

Pillar talk, page 38



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Mesfin Tasew:
"Though we have not yet got back to the pre-Covid-19 performance level, Ethiopian is still a profitable company."

PICTURE: DANIEL GETACHEW.

South African carrier, Comair, went into provisional liquidation on June 14. Guy Leitch looks at what went wrong.



SOUTH AFRICA GETS ANOTHER RECEDING AIRLINE

Two brands: Comair operates the British Airways franchise for southern Africa, and kulula.com, an innovative low-cost carrier.

PICTURE: COMAIR.

Up to its liquidation, Comair had been one of the South Africa's most successful airline operators, having never failed to make a profit in its 72-year history before Covid.

It operated the British Airways franchise for southern Africa, and kulula.com, an innovative low-cost carrier.

During the pandemic, the airline sought refuge in the business rescue process, enabling compromises to be made with creditors and drastic cost-cutting, which reduced staff from 2,500 to just 1,200 personnel.

However, this was not sufficient to ensure its survival and, on May 31 2022, the airline grounded itself as it had run out of funds to continue operations.

Then, on June 14, the airline's business rescue practitioners put Comair into provisional liquidation.

With hindsight, it may be argued that Comair's problems began in 2014, when it disastrously hedged 26% of its fuel purchases at \$82 a barrel. As the oil price dropped, the airline found itself unable to compete with its rivals,

who were buying fuel at almost half the price.

Comair's problems were compounded when it ordered five Boeing 737-8 MAXes and embarked on an aggressive expansion campaign, buying up supplier businesses. As a result, it was largely reliant on creating debt to finance further aircraft.

This stretched its already thin balance sheet and left it with minimal reserves when the Covid lockdown hit in March 2020. It created a perfect storm for the airline.

Comair CEO, Glen Orsmond, said that the Covid pandemic stretched on and on and then, when people were beginning to return to flying in late 2001, the Omicron variant hit the airline particularly hard.

Omicron dramatically reduced the number of arrivals to South Africa on British Airways and hammered Comair's BA brand harder than the other airlines.

The situation worsened when, in March 2022, the South African Civil Aviation Authority (SACAA) grounded the entire airline for four days.

Citing safety concerns after three in-flight

incidents, the SACAA imposed a 'precautionary suspension'. When, after just four days, the grounding was lifted, transport economist, Dr Joachim Vermooten, said a 'precautionary suspension' implied that the SACAA did not have evidence of possible "imminent danger" concerning the airline and, thus, it should not have been grounded.

The final nail in the airline's coffin was the huge increase in the cost of fuel – from around \$40/barrel pre-Covid to more than \$120. Given that a large percentage of the airline's seats had been pre-sold on the basis of low fuel prices, the business recovery practitioners deemed the airline beyond saving and so, on June 14, applied for voluntary liquidation.

In what now appears to have been another misstep, the airline's directors chose business rescue rather than direct engagement with the creditor banks, of which Nedbank is the biggest, but which also included RMB, Citibank, Investec and USEXIM bank.

The directors had chosen business rescue as

this would give them more power to negotiate with creditors, since it protected them from repayments.

Before its liquidation, Comair provided 40% of the available domestic airline seats in South Africa. Its closure will have an enormous impact on the South African airline industry and the broader economy – especially tourism.

The liquidation of the airline is seen as particularly tragic, given its stellar reputation.

Its reputational damage from the CAA grounding and subsequent liquidation may be expected to terminate the licensing agreement with British Airways, removing one of the airline's key assets.

From its most recent annual reports, and those of the business rescue practitioners, the airline has assets of around R3.5 billion (\$220 million), mainly in the value of its fleet of Boeing 737-800s.

Comair's competitors are bidding to acquire many of these assets at fire-sale prices.

There is also the hope that an investor may buy the remains of the airline from the liquidator and restart flying – possibly under another brand. ▲

Rejoindre le club : RAM fait désormais partie de l'alliance Oneworld.
IMAGE : RAM.

L'AFRIQUE BÉNÉFICIE DE LA CONNECTIVITÉ ONEWORLD VIA RAM

Royal Air Maroc a donné le coup d'envoi d'une nouvelle campagne de marketing en Afrique à Abidjan en début d'année pour présenter les bénéfices de son partenariat à Oneworld. Des détails avec Vincent Chappard.

Royal Air Maroc (RAM) va ainsi passer d'un réseau d'une centaine de connections de ses bases au Maroc à plus de mille au niveau mondial grâce à son partenariat avec Oneworld.

« Nous entamons une nouvelle orientation stratégique », affirme le PDG de RAM Abdelhamid Addou. « Nous sommes aujourd'hui engagés dans une dynamique de relance de notre activité et l'Afrique est au cœur de notre stratégie de développement. Cette alliance va faire croître le marché en Afrique », souligne-t-il.

En bénéficiant des cinq hubs de l'alliance, Royal Air Maroc va bâtir toute une panoplie d'offres à partir des 14 compagnies aériennes membres et un faisceau de services auprès d'un millier d'aéroports.

« Nous avons donc décidé de permettre à nos partenaires et à nos clients de profiter des bénéfices et d'une multitude de possibilités de connexion au niveau mondial qu'offre notre adhésion à Oneworld. »

Les 14 compagnies membres de l'alliance Oneworld desservent aujourd'hui 170 pays dans le monde, totalisant 580 millions de passagers en 2019.

« Nous sommes aujourd'hui la compagnie africaine aérienne qui via son réseau très dense, possède le plus grand nombre de connections entre l'Afrique et l'Europe et entre l'Afrique et l'Amérique du Nord », rappelle Abdelhamid Addou.

Le PDG de la compagnie est aujourd'hui convaincu que la reprise des activités constatée depuis début février devrait rapprocher RAM de ses capacités de 2019 en termes de flotte et de connectivité. La saison Été 2022 d'IATA s'annonce prometteuse.

« Nous comptons être en capacité maximale cet été avec la cinquantaine d'avions de notre flotte et un affrètement additionnel entre 5 à 10 avions », soutient-il.

□□□□□

Rappelons qu'en 2022, RAM a transporté 75 millions de passagers et enregistré un chiffre d'affaires de 2,6 milliards de dollars US. Elle souhaite se concentrer sur des villes industrielles où il y a plus de demandes et se renforcer notamment en Afrique subsaharienne comme Abidjan ou Bamako. Elle a stoppé ses routes vers la Russie.

RAM a également effectué son vol inaugural entre Casablanca et Tel Aviv en mars dernier. Un accord de partage de codes a été nt signé avec El Al Israel Airlines.

Royal Air Maroc et Emirates ont également signé début mai, un partenariat de partage des codes pour le renforcement des vols entre Dubaï, Casablanca et d'autres destinations.

La compagnie nationale marocaine envisage un retour à la situation pré-Covid-19 d'ici deux années en termes de chiffres d'affaires. ▲

SUMMARY

AFRICA BENEFITS FROM RAM'S ONEWORLD CONNECTIVITY

Morocco's national airline, Royal Air Maroc (RAM), has launched a major marketing campaign throughout Africa, showcasing the benefits of its recent membership of the Oneworld alliance.

Membership means that RAM will have direct access to more than 1,000 worldwide destinations and connections – a ten-fold increase.

RAM CEO, Abdelhamid Addou, said: "We are embarking on a fresh strategic direction, engaging in a dynamic relaunch with Africa at the heart of our strategy. This alliance will grow our market throughout Africa, so our partners and customers can take advantage of the global connections offered by Oneworld."

RAM intends to build a range of offers from the 14 member airlines, including services provided at more than 1,000 airports in 170 countries worldwide.

Addou continued: "We are the African airline that has the most connections between Africa and Europe – and also between Africa and North America."

The CEO said that the resumption of activities since the beginning of 2022 will bring RAM closer to its 2019 capacities in terms of both fleet and connectivity.

"We expect to be at maximum capacity this summer with our fleet of 50 airliners and an additional charter of up to 10 extra aircraft," he concluded. ▲

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Bruce Augoula a décidé en 2019, en pleine crise sanitaire, de relancer la compagnie Lignes Aériennes Gabonaises (LAG). Un reportage de Romuald Ngueyap.

LAG PRÉPARE SON RETOUR À LIBREVILLE

Le Gabon et ses plus de 2 millions d'habitants est aujourd'hui un marché aérien en pleine croissance qui connaît une situation de quasi-monopole avec une compagnie domestique et régionale. Bruce Augoula souhaite renverser cette tendance et tirer pleinement profit des potentialités du cinquième producteur de pétrole d'Afrique.

Le processus de certification est à stade avancé. « Nous sommes aujourd'hui en phase 3 et comptons obtenir notre CTA le plus rapidement possible » estime Bruce Augoula. « Nous sommes persuadés que LAG sera dans les airs avant la fin de l'année ».

LAG a démarré depuis janvier 2022 ses vols commerciaux entre sa base de Libreville et Douala au Cameroun avec une flotte Embraer E175/195, les droits de trafic étant d'un opérateur sous-régional.

« Nous travaillons sur un réseau régional plus étendu, le Gabon attire beaucoup d'expatriés et commerçants venant

SUMMARY

LAG PREPARES FOR ITS DOMESTIC RETURN

Bruce Augoula has decided to relaunch his company, Lignes Aériennes Gabonaises (LAG), in Gabon.

Based on his experience with Africa Airways, which he launched in Benin in 2007 then sold four years later, Augoula estimates that, after three years, LAG will have assets necessary to "become a major player on the continent within the framework of a pan-African alliance".

Augoula's confidence is based on Gabon being Africa's fifth-largest oil producing nation with more than two million inhabitants and a growing air transport market.

LAG actually began commercial flights in January this year between its base in Libreville and Douala in Cameroon, with an Embraer E175/195 fleet, utilising traffic rights from another operator.

"We now intend to obtain our air carrier

certification [for domestic routes] as soon as possible," said Augoula. "We are working on establishing a larger regional network, as Gabon attracts a lot of expatriates and traders from west and central Africa."

LAG, which was originally created in 2005, intends to focus on the domestic market as, with more than 80% of the country forested, the aircraft remains the preferred means of reaching remote regions.

"With around 20 airports, Gabon is a country where the domestic network is very dynamic. The number of passengers is increasing and we want to take part in that growth," explained Augoula.

LAG will begin operations on domestic routes with a fleet of Twin Otters and, to that end, an agreement was finalised early this year with technical partner Tunisavia.

ROMUALD NGUEYAP

► Nous sommes persuadés que LAG sera dans les airs avant la fin de l'année ►
BRUCE AUGOULA



PHOTO : LAG

d'Afrique de l'Ouest et du Centre. D'autres destinations hors du continent sont aussi à l'étude » affirme Bruce Augoula.

LAG souhaite se concentrer sur le marché domestique. Dans ce pays côtier de 267 667 km² couvert à plus de 80 % par la forêt, l'avion reste le moyen privilégié pour atteindre les régions reculées de l'hinterland. On y dénombre une vingtaine d'aérodromes. « Le Gabon est un des pays où le réseau domestique est très dynamique. Le nombre de passagers ne fait qu'augmenter et nous allons y prendre part ».

LAG débutera ses opérations sur les routes domestiques avec une flotte de Twin Otter.

Un accord a été finalisé en début d'année avec son partenaire technique Tunisavia.

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« C'est un avion de type STOL, Il est particulièrement adapté pour des pistes courtes et non bitumées ». LAG envisage des avions de plus grandes capacités à l'avenir

Le Gabon a vu la disparition ces dernières années de plusieurs compagnies locales dont Afric Aviation, Allegiance Airways et NRT. Cela n'affecte pas l'optimisme de Bruce Augoula. Pour ce spécialiste des enjeux de l'aviation africaine, le casting de l'équipe dirigeante et le choix des partenaires joueront une place primordiale dans la réussite de LAG. « Nous avons des partenariats en cours de négociation ».

S'adossant sur les expériences de LAG en 2005 et d'Africa Airways qu'il a lancé au Bénin en 2007 puis revendu quatre ans plus tard, Bruce Augoula estime qu'après trois années d'opérations, LAG disposera des atouts nécessaires pour « devenir un acteur majeur du continent dans le cadre d'une alliance panafricaine ».

La société internationale de leasing et de gestion d'actifs ABL Aviation prévoit une croissance de ses activités y compris en Afrique. Un reportage de **Vincent Chappard** et **Anuradha Deenapanray**.

ABL Aviation vise la croissance internationale

ABL Aviation trace sa route depuis 2014 sur le marché très compétitif du « leasing ». Fondée et dirigée par Ali Ben Lmadani, elle opère depuis ses cinq bureaux dans le monde : Dublin, Casablanca, Dubaï, Hong Kong et New York.

ABL Aviation est la seule société de leasing à s'être implantée en Afrique. Rodrigo Simoes a été récemment nommé directeur technique et à la tête du bureau de Casablanca.

Malgré la crise du Covid-19, la société a pu mener de nombreuses opérations de leasing en 2021. Citons entre autres deux Airbus A350 ayant rejoint la flotte de Lufthansa, 8 A220 d'une compagnie aérienne aux États-Unis, quatre B787 à El Al et un A321 Alaska Airlines.

ABL Aviation a également mis en place une coentreprise avec Ellington Management Group, un fond spéculatif alternatif. À la clé, 800 millions de fonds d'investissement pour opérer sur le marché.

Ali Ben Lmadani prévoit une forte demande sur le marché pour la prochaine décennie. L'aviation restera un actif sûr après la récession.

Selon lui, malgré le contexte géopolitique et commercial lié à la guerre entre la Russie et l'Ukraine, et l'inflation galopante, des investisseurs d'autres secteurs vont entrer dans l'industrie du transport aérien comme ils l'ont fait dans le « shipping » ou l'immobilier.

Il y aura également plus de potentiel et d'avantages pour

les compagnies aériennes à recourir au « leasing » pour des durées de 8, 10 et 12 ans.

Comme le souligne Ali Ben Lmadani, le but d'une compagnie aérienne est avant tout de remplir des sièges, d'avoir des employés performants, de s'approvisionner en kérosène à un prix compétitif et de disposer d'une flotte d'avions répondant aux demandes de leurs marchés. « Si vous faites du leasing, après 7 ans, vous pouvez vous adapter. Or, il n'y aucun marché qui reste le même pendant 25 ans. ».

ABL Aviation est en contact avec plusieurs acteurs en Afrique.

« Le Leasing est une solution d'avenir pour l'Afrique », estime Ali Ben Lmadani. « Il reste cependant trop cher pour le continent, les risques sur les pays et les impayés étant élevés. »

Il existe également de nombreuses opportunités au Moyen-Orient, selon le PDG d'ABL Aviation, notamment au niveau des structures financières. « Nous essayons de développer ce type de produits assez innovants qui nous permettent d'être compétitifs. »

ABL Aviation compte poursuivre ses partenariats au Japon avec l'ouverture d'un nouveau bureau ainsi qu'aux USA. Elle compte également développer ses produits en Afrique et au Moyen-Orient. « Il est nécessaire d'être prêt des investisseurs pour expliquer nos produits. » ▲

Ali Ben Lmadani:
« La force d'ABL Aviation est d'être innovante, efficace et rapide dans sa prise de décision ainsi que dans le délai d'exécution de ses contrats. »
PHOTO: ABL AVIATION

SUMMARY

ABL AVIATION TARGETS INTERNATIONAL GROWTH

International leasing and asset management company, ABL Aviation, is expecting to grow its international business.

Founded and managed by Ali Ben Lmadani, ABL Aviation is the only leasing company to have established itself in Africa. Rodrigo Simoes was recently appointed technical director and head of the Casablanca office.

In addition to Casablanca, the company operates from offices in Dublin, Dubai, Hong Kong, and New York, and shortly expects to open new facilities in Japan and the US.

Despite the Covid-19 pandemic, the company was still able to carry out numerous leasing operations in 2021. This included two Airbus A350s for Lufthansa; eight Airbus A220s for US airlines; four Boeing 787s for El Al; and an Alaska Airlines' Airbus A321.

"ABL Aviation is a leading innovator when compared with its many competitors," said Ben Lmadani. "Our strength is to be innovative, efficient and fast in our decision-making – as well as in the execution of contracts."

The CEO predicts strong demand in the market for the coming decade, believing that aviation will remain a safe haven, even following the pandemic and possible global recession. ▲

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The long-expected pilot shortage has now begun to hit home, with airlines around the world cancelling flights due to a lack of crews, particularly in those countries experiencing a strong bounce-back in air travel demand after Covid-19. **Guy Leitch** reports.

In March, US-based JetBlue Airways cancelled 63 flights as it had no crew and it reportedly had another 117 flights to which it had no-one rostered.

This fast-arriving international pilot shortage will soon hit African airlines.

Despite their slow return to pre-Covid-19 levels of flying, African airlines will not be immune to this looming pilot shortage as they struggle to prevent their most senior pilots, plus engineers and air traffic controllers, taking up lucrative offers elsewhere.

South African flight school owner and former SAA training captain, Mike Gough, says that, far from reducing the expected pilot shortage, the Covid-19 pandemic has aggravated it.

The US Federal Aviation Administration (FAA) expects that as many as 40% of US air transport pilot licence (ATPL) holders will retire before 2025. On top of that, Gough believes that many of the pilots furloughed during Covid have turned to other industry sectors.

Up until the arrival of Covid-19 it was believed that the African aviation market had the greatest growth potential, due to it being a comparatively young industry and servicing a rapidly emerging middle class. Yet Africa has struggled to meet its own demand for pilots and engineers and is becoming the training ground for airlines around the world.

To meet global demand, many of South Africa's flying schools have successfully pivoted from training South African pilots to those from other countries.

Attie Niemann, CEO of well-known South African flight school, 43 Air School, says that 70% of its students now come from India, the Middle East and Vietnam, in addition to Africa. He also notes that there are an increasing number of students coming from Europe.

Some countries have specifically selected South Africa as a base for training their future pilots.

South-African based AIFA – the AVIC: International Flight Training Academy – was started to train Chinese pilots and soon expanded to include three large training bases.

Johannesburg-based Skyhawk Flight

CREWS OUT OF CONTROL



School has found tremendous demand from Egyptian students and owner, Gough's, presentation to an air training expo in Alexandria was a huge success in attracting yet more students.

On top of the world: Trainees in South Africa gain their cabin crew skills. Some countries have specifically selected South Africa as a base for training their future pilots.

PICTURE: MATA

Inset: The looming skills shortage will also include aircraft engineers.

PICTURE: 43 AIR SCHOOL.



The pending shortage of pilots and aviation support skills in Africa is further aggravated by the brain drain of skills to beyond the continent.

As the skills shortage grows it is expected that airlines, particularly those in the Middle East and China, will further increase their tax-free salaries to attract African pilots to greener pastures.

Africa has traditionally had little demand from its local inhabitants for flight training. Some argue that the standard of maths and science education is beyond the capability of many poor schools. Further, the working conditions of a junior pilot do not have the prestige, or office hours, or security, of being a manager in government employ.

Pre-Covid, air traffic to and from Africa had been growing at roughly 8% per annum from 2005-2015, with regional and domestic traffic increasing even more.

Analysis by Oxford Economics showed that the African aviation sector as a whole was expected to grow by around 5.4% per annum, a faster pace than most regions of the world.

South African flight schools have taken the opportunity presented by this growth in demand, and a plethora of private and public partnerships have developed to meet the future need.

A quick count revealed nine such programmes, of which many rely on corporate or donor funds, while others use taxpayers' money.

However, there is much overlap and very little attempt to harness and coordinate their efforts. This is because each one is 'owned' by a particular entity or association, all under pressure to prove their individual corporate social responsibility and transformation credentials.

Gough argues that this creates a wonderful opportunity. He said: "Instead of funnelling billions into the black hole of South African Airways (SAA), why not harness and coordinate the 10 or so pilot development programmes, so that the disadvantaged really can have a fair shot at becoming a pilot. We will certainly need them in the future."

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High hopes: Cadets ready for the 'dream job'. But does low – or zero – pay make the effort and debt worthwhile?

PICTURE: FTC.

The airline industry has, rightly, identified human capital – or a lack of it – as being one of the biggest challenges to future-proofing business if the growth predicted widely by industry experts comes to pass.

At the African Airlines Association (AFRAA) stakeholders meeting in Nairobi in May, both Airbus and Boeing were laying out their forecast for Africa's airlines over the next 20 years and broadly agreed that up to 1,100 new aircraft would be needed, with the majority being single-aisle.

The figure excluded growth for market sectors like regional jets and the smaller types operating domestic and tourist routes in Africa, such as single-engine Cessna Caravans.

This large increase suggests that, with a requirement for between eight and 15 pilots per aircraft, the number of new pilots would be in excess of 10,000.

Engineers and technicians are also likely to be in demand as the emphasis today is on bringing more maintenance, repair and overhaul (MRO) resources on to the continent in order to reduce the cost of services in Europe and the Middle East.

Companies are happily increasing corporate social responsibility (CSR) activities as they encourage high-school children to embrace science, technology, engineering, and maths (STEM) subjects and to develop a passion for aviation, whether on the ground or in the air.

Covid-19 has had a global effect, with many captains who were nearing retirement leaving early, and others returning to former careers with no plans to fly again. Airlines are also struggling financially.

Now pilots in Kenya have voiced their

Dream jobs that turn into a debt nightmare

As airlines carry out their recovery strategies to emerge from the Covid-19 pandemic, is it right that the most vulnerable of employees – new pilots – should bear the brunt of the costs? Alan Peaford looks at the arguments.

concerns by asking KALPA – the country's pilot association – to push for a minimum wage, especially for the competitive general aviation (GA) charter operations that are so vital for tourism and humanitarian transport in their country.

"This will bring back sanity to an industry that was once prestigious so that we can wear our wings with pride again," said one pilot, who asked to remain anonymous.

"No pilot should pay for their own qualifications. This has caused encroachment by foreigners, who already have those ratings, while our own [pilots] remain side-lined."

KALPA, itself, has spoken out about the number of Kenyan pilots sitting idle while more expatriates have been appointed.

Meanwhile, more training academies are being formed on the continent, while international independent academies, or

even airline-owned training schools, are vying to recruit cadets – for fees around \$130,000 – with a promise of a likely career.

Kenya Airways CEO, Allan Kilavuka, was asked about the issue at the recent AFRAA event.

"I'm told this is a worldwide problem," he answered. "I was complaining about this to colleagues from Emirates and Etihad. But how do you crack this?"

"Training is very expensive and someone has to bear the cost? I think the question is, do we, as airlines, bear the cost of training pilots and then increase our costs? Or do we have the pilots bear the cost? I don't have a solution for that and cannot think of a different way of doing it other than what we're doing today."

The bizarre supply and demand disconnect is already causing problems.

"The pilot shortage for the industry is real, and most airlines are simply not going to be able to realise their capacity plans because there aren't enough pilots,

Continued
on Page 27

▼ No pilot should pay for their own qualifications. ▲

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Building block: The single-engine Cessna Caravan, often single-pilot, is the workhorse of the commercial general aviation fleet where fresh pilots build their hours.



OPINION

CONTINUED FROM PAGE 25

at least not for the next five-plus years," said United Airlines CEO, Scott Kirby, recently.

His airline launched its own training school in December, with a goal of training 5,000 pilots there by 2030. The airline covers the cost of pilots' training only up to the point of receiving their private pilot's licence.

Other US carriers have turned to low-interest loans, or other initiatives, to ease the financial burden on students.

Geoff Murray, a partner in the Oliver Wyman consultancy, sees a major challenge ahead.

"In recent years, airlines have provided a more direct path to the cockpit for new pilots, expanding cadet training programmes and providing financing," he said.

"However, with Covid, many of the airline pipeline levers have come under pressure. Faced with mounting costs and a pilot surplus, cadet programmes are being trimmed. Some of the banks that have supported the financing are reconsidering the risk profile of a new pilot cadet, and the attraction of a stable and lucrative career path now looks much less secure.

"For airlines currently struggling to right-size their operation and remain solvent, the idea of a pilot shortage is far from the top of their minds. However, it has the real potential to limit their ability to regrow and rebuild their operation in the coming years," he concluded.

The issue will now be highlighted at this year's Aviation Africa Summit to be held in Kigali in September where pilots, airlines, and trainers will be at the event. ▲

HOW AVIATION IS KILLING PILOT DREAMS

Kenyan aviators, Edward Njeru and Nicole Andayi, have the good fortune to work with a reputable operator, but they see colleagues around the region struggling, hampered by debt and low expectation. Here are their thoughts.

Being a pilot has been one of the greatest dreams for many people across the world.

It is a valid dream. But, in the recent past, this dream is harder to pursue, especially for those from humble beginnings.

Many pilots are sinking in debt as training costs have become more expensive, especially in Africa.

Pilots who have recently received their licences start off their career in general aviation but still have to continue paying for type ratings and time on commercial aircraft to build up their hours.

It is vital to note that, even with a commercial pilot licence (CPL) and type rating, the subsequent pay for pilots, especially first officers, is very low. This means that they are often unable to pay off their debts, or afford a comfortable living, in their early stages of their careers.

□ □ □ □ □

Aviation is a prestigious career and comes with a great sense of responsibility and yet pilots' salaries have greatly declined. The remuneration in the industry is getting worse by the day.

For instance, Wilson Airport in Nairobi is recognised as one of the busiest airports in east Africa. The assumption, therefore, would be that pilots operating from there are earning a decent living.

According to our research, the average entry-level salary of a first officer, with a CPL and rated on the Cessna Caravan, the most popular entry-level aircraft in the region, is \$270 a month. This is less than what most graduate interns earn in institutions in Kenya.

Many of these pilots and their families have taken loans of up to \$60,000 to fund their CPL training. This means they are swimming in debt for a greater part of their lives, struggling to survive on the job.

Some airlines and operators are taking this even further and not paying their first officers at all, stating that they are "paying with experience".

Many of the airlines blame the low salaries on the



Young aviators:
Edward Njeru
and
Nicole Andayi.

PICTURE:
E NJERU

Covid-19 pandemic, but the reality is that no pilot deserves such low pay.

Most of the airlines operating the Cessna Caravan are under contract with reputable non-governmental organizations (NGOs), which pay them great sums of money. It is sad that this does not trickle down to the pilots, who are at the forefront of any airline operation.

□ □ □ □ □

Many of these pilots are forced to relocate to neighbouring war-torn countries, like South Sudan, to seek flying experience, risking their lives. Yet, even this is definitely not reflected in the remuneration that they receive.

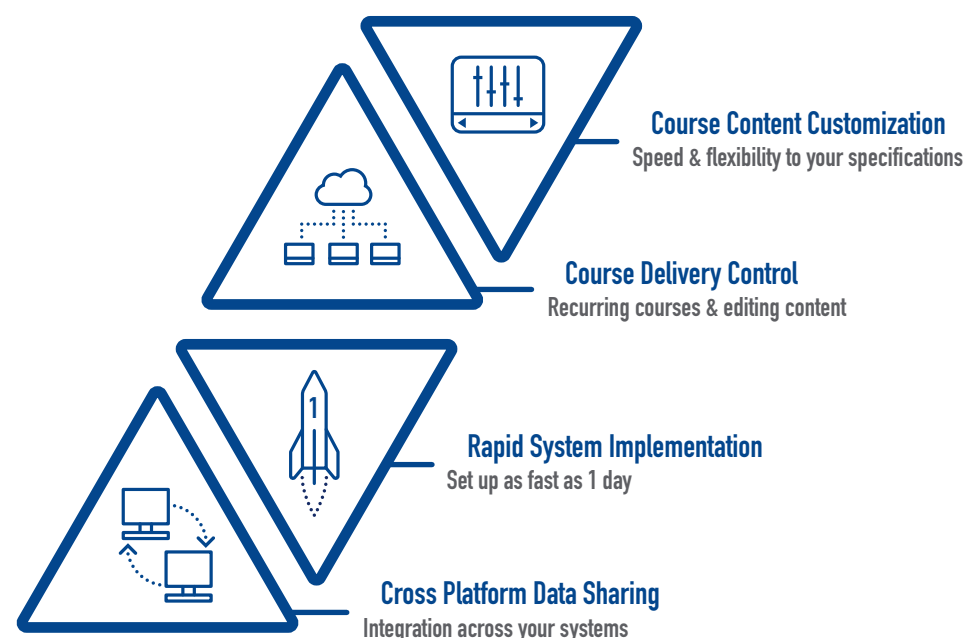
With an influx of pilots here in Kenya and across Africa, airlines are taking advantage of this huge pool to offer very low salaries, knowing that many are desperate to get jobs.

On top of this, the minimum-hour qualification to get into these airlines is normally high, with many airlines preferring to recruit crew with greater experience and more than a thousand hours on type.

While the pandemic may have greatly contributed to the pay scale of most African airline pilots, other factors, such as poor management of resources, corruption, and expensive airline decisions, have all added to the problem in one way or another. ▲

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PARTNERSHIP FOCUSES ON YOUNG PILOTS

A South African flying school has teamed up with two businessmen to help disadvantaged youngsters take the first steps towards a career as pilots. Alan Dron reports.

Durban businessman, Phinda Fikeni, and his business partner, Mzwakhe Sithole, have decided to support the city's Focus Air Flight School by assisting students enrolling for an 18-month pilot training programme, without having to fund the course up front.

The high costs of learning to fly have traditionally been a major obstacle in many countries for talented youngsters from disadvantaged backgrounds.

The new scheme aims to fund trainees to get a private pilot's licence (PPL), the first rung on the ladder towards becoming a commercial pilot.

"We get a lot of people coming from disadvantaged homes and rural areas," explained Focus Air Flight School's founder and CEO, Fathima Khan. "These people are some of the high-fliers in their school; they do exceptionally well and, unfortunately, don't get the opportunity."

Khan said that she had come from a disadvantaged background, which had made her determined to try to help people in similar situations, adding that the school has run its own scheme to help less well-off students for some time.

"We first fund their exams and ground school because I feel that's the most testing part. If not, we go to various organisations to try to get some funding," she explained.

To reach higher qualifications levels, students require a minimum of around 24 months' training, emerging with a commercial pilot's licence (CPL) and a

'frozen' airline transport pilot's licence (ATPL). The ATPL qualification consists of practical flying and theoretical study, with exams to test each subject.

If a student has passed all of their theoretical exams, but has not yet flown the minimum required 1,500 hours, then their licence is considered 'frozen' or inactive.

To help them reach the 1,500-hour target, Focus employs them as instructors on a minimum salary, to help them build up the necessary hours.

One possible future avenue for helping youngsters through pilot training may emerge from South African Airways' (SAA) recent 'business rescue' financial restructuring period, when three SAA pilots came to Focus to act as instructors: "I aim to have forged a relationship and hope something will come of that," said Khan. ▲



Opportunity: A Piper Seneca is one of the aircraft types used by Focus Air Flight School to train young pilots.

PICTURE: RENATO CARVALHO VIA WIKIMEDIA COMMONS.

BURSARIES ON OFFER

The Air Traffic and Navigation Services (ATNS) in South Africa is forging ahead with its bursaries programme.

ATNS provides air traffic navigation, training, and associated services within South Africa and surrounding regions, and offers bursaries for aeronautical information management officer (AIMO), air traffic services officer (ATSO), and air traffic control officer (ATCO).

The bursary provides each recipient with an opportunity to conduct their studies at the ATNS Aviation Training Academy (ATA) in Johannesburg.

ZIMBABWE ACADEMY MOVE

The Civil Aviation Authority of Zimbabwe (CAAZ) has reportedly set up an aviation training academy, the first of its kind in the country, as it seeks to widen its revenue streams, according to local news source *New Ziara*.

Training courses include international air law, aviation management, dangerous goods awareness, and aviation security training.

It's not immediately clear when the facility will open and if training will extend to air traffic control (ATC).



Vital equipment: The Beech1900 full-flight simulator. PICTURE: SIM AERO.

GREEN LIGHT FOR NEW BEECHCRAFT 1900 COURSE

A new optimised Beechcraft 1900 type rating course has been approved by the Civil Aviation Authority of South Africa (SACAA).

The SIMAERO course consists of eight days of ground school for technical training and multi-crew cooperation. It includes 16 hours of simulator training, 12 hours of which are performed in fixed-base mode.

The Beechcraft 1900 is a popular aircraft in Africa with a wide range of uses for passenger and cargo operations. The B1900 type rating is also one of the most favoured choices for self-sponsored pilots interested in enhancing their careers.

The flight training device has a level D qualification and is equipped with an FSI Vital 9 visual system for optimal accuracy and safety. ▲

WHY AFRICA MUST RAMP UP ATC TRAINING

As several African states emerge from the Covid-19 pandemic, countries like Nigeria are scrambling to get enough air traffic control (ATC) staff trained up.

Local reports suggest that the Nigerian Airspace Management Agency (NAMA) has been forced to engage non-technical staff and retirees to address the ATC gap.

It is also reported that the agency is seeking funds for training in places like Egypt, Morocco, South Africa and Singapore as a cheaper alternative to Europe.

There are growing calls for regulators and the private sector to help lower training costs and introduce initiatives to boost ATC numbers.

German-based DFS Aviation Services deals in all aspects of air traffic management and, as a

step towards further expansion in the African market, recently teamed up with the Test Flying Academy of South Africa (TFASA) to cooperate on air traffic service training opportunities.

TFASA plans to become a leading training supplier in Africa for air traffic control officer management and system training, and sees this agreement as a natural extension of its business profile.

Jean Rossouw, executive chairman and president of TFASA, said he was happy to supplement the core training on offer and added that, with the world-renowned air traffic control training that DAS is bringing to the table, its products would certainly appeal to the TFASA customer base and enhance the scope of training on offer. ▲

KEITH MWANALUSHI



Signing up: DFS Aviation Services and TFASA aim to cooperate on air traffic service training opportunities.

PICTURE: DFS AVIATION SERVICES.

GRADUATING INTO A WORLD OF WORK

The first aerospace management graduates from Cote d'Ivoire's Yamoussoukro Training Center will have operational responsibilities within Air Côte d'Ivoire, Sodexam, which is responsible for the management, operation and development of airports, meteorology and aeronautical activities in the country, and the Côte d'Ivoire Civil Aviation Authority (ANAC).

The training programme is part of a memorandum of understanding (MOU) signed in 2018 between Cote d'Ivoire and Airbus, which has established a strong framework of collaboration for industrial development, job creation and capacity building.

The links were further strengthened when Abidjan-based Air Côte d'Ivoire became the first airline in west Africa to operate an A320neo.

According to Airbus, this multifaceted collaboration in the



A first for west Africa: Air Cote d'Ivoire's A320neo.

PICTURE: AIR COTE D'IVOIRE.

aerospace sector epitomises its commitment "to support the sustainable socioeconomic development of Africa".

The various partnerships are in line with the government's vision to make Cote d'Ivoire a hub for aerospace technology and industry, a sector identified as strategic for its economic development and leadership in the region. ▲



History-maker: The Pipistrel Alpha Electro trainer that has made its first flight at 43 Air School.

SIMULATOR DEAL

An Alsim ALSR20 simulator is heading to Cirrus South Africa, based at Lanseria.

Cirrus South Africa is an approved Cirrus platinum partner, guiding customers through the purchase of the Cirrus SLR20 and then looking after training and maintenance of the aircraft at Lanseria.

Cirrus South Africa's Tony Forbes said: "The reliability and the quality of the product, as well as the impressive in-house support structure, were the key factors for our decision to buy from Alsim." ▲

EASA APPROVAL

EgyptAir Training Academy (ETA) has succeeded in renewing the European Aviation Safety Agency's (EASA) approval for its Airbus A220-300, A320-200, A330-200, A340-300 simulators. ▲

AIR SCHOOL MAKES ALL-ELECTRIC HISTORY IN AFRICA

The first all-electric aircraft in Africa made its inaugural flight on March 16 at 43 Air School, South Africa.

The school has acquired the Pipistrel agency and flown its first Alpha Electro.

CEO, Attie Niemann, said: "The Alpha Electro's running cost is a significant saving on a conventional combustion engine. The lithium battery can safely fly for approximately an hour with reserves, which is sufficient for the majority of training flights."

He added: "It was quite a process to get electric aircraft approved by the regulators, but since the European authorities have done so last year, it follows naturally that we should too." ▲

The International Civil Aviation Organization (ICAO) recently granted regional training centre of excellence status to the Zaria-based Nigerian College of Aviation Technology (NCAT).

Chukwu Emeke found out more from the college's rector and chief executive officer, Alkali Modibbo.

NCAT is looking to speed up improvements and upgrade its training facilities in the light of the ICAO regional training centre of excellence (RTCE) accreditation.

The college's rector and chief executive officer, Alkali Modibbo, said: "The benefits of this certification is that we can increase both conventional and ICAO training courses.

"In 2021, we conducted more than 50 courses despite the Covid 19 pandemic, and we still have those offerings. The RTCE will give us more visibility both internationally and locally."

NCAT was set up in 1964 and charged with the responsibility of training pilots, air traffic controllers, aircraft maintenance engineers, aeronautical telecommunications engineers, cabin crew, flight dispatchers, and several other aviation professionals.

It has six training schools uniquely co-located, including:

- Flying School (FS);
- Aircraft Maintenance Engineering (AME) School;
- Aeronautical Telecommunications Engineering (ATE) School;
- Air Traffic Services/Communications (ATS/Com.) School;
- Aviation Management School (AMS);
- Airport Emergency Training School (AETS).

NCAT off-campus training courses have also been introduced, which are basically post-graduate management courses, while the part-time programme, started in 2019, currently has more than 130 participants, with 38 in Abuja and 99 in Lagos.

"The programme is growing daily," said Modibbo. "Most of those who participate are people who work in different establishments in the aviation sector. Despite their tight schedules, they still find time to take part in the programme. The way we operate is that if you miss a module, you can always take it later."

NCAT ready to pounce on future business



Measures are also being put in place to secure the approved maintenance organization (AMO) status for the government-owned institution. "Hopefully, we will get the AMO certification this year," said Modibbo.

With 20 serviceable aircraft currently on NCAT's books, Modibbo said: "So far, we have Diamonds, Tampicos and Beech Baron58s. We are looking at getting more Diamond aircraft.

"Seven Diamond aircraft were supplied in 2020 and, this year, we will be

taking delivery of two more – double and single engine," said Modibbo.

"The Diamonds have advanced cockpits with the latest technology and use Jet A1, which is cheaper than the aviation gas (AvGas). Aviation gas is not easy to come by. We have to import it into Nigeria and that is what the Tampicos are using."

With the ongoing certification of NCAT's B737 simulator involving various bodies, including the Nigerian Civil Aviation Authority (NCAA) and some foreign certification agencies, expectations are high for more training both internationally and locally.



NCAT is also considering the acquisition of Hungarian Magnus aircraft. "We have been to the company's factory with the NCAA and the Federal Ministry of Aviation, and we have conducted our technical inspection. Sooner or later, we will start to have those machines here," confirmed the rector.

"The advantages are that the aircraft is made from carbon fibre and is very light. It uses premium motoring spirit (PMS), like you use in your car. So, from AvGas, we went down to Jet A1 and now we are also going into PMS. It is going to be less expensive to run.

"The aircraft is unique in that, if you lose an engine, there is a parachute that you pull and the engine will come away and the pilot will still be able to land the aircraft. With this, you have saved a life and the equipment."

Seven Diamond aircraft were supplied in 2020 and, this year, we will be taking delivery of two more. ▲ Alkali Modibbo

PICTURE: LAMIDI AYODELE.

Upgrading: Algeria may acquire up to eight Lockheed C-130Js – the first pair delivered have been second-hand former LM-100J civil freighters.

PICTURE: US AIR FORCE.



BIG LIFT FOR ALGERIA

The Algerian Air Force has received its first two Lockheed Martin C-130J-30 Super Hercules tactical transport aircraft, becoming the second operator of the type in the process.

Jon Lake reports.

The US Embassy in Algiers announced the delivery of the first Algerian C-130J – a Facebook post marking the public announcement of the sale.

The 2018 contract between Algeria and Lockheed Martin was for four aircraft, and there was an option for four more. The contract value has never been disclosed.

So far, 25 nations have ordered the C-130J. Tunisia was the first African operator, taking delivery of two stretched C-130J-30s in December 2014.

The initial Algerian Super Hercules (7T-WJA) was a former Lockheed Martin demonstrator (N5103D) that first flew on June 30 2017, and which also served as the commercial LM-100J prototype.

The aircraft left the Lockheed Martin facilities at Greenville, South Carolina, and arrived at Boufarik Air Base after transiting via Bangor International Airport in Maine. Boufarik is the main Algerian Air Force base for transport aircraft, and the home of Algeria's Hercules operator, the 2ème Escadre de Transport Tactique et Logistique (2nd Tactical Transport and Logistics Wing).

Algeria received 21 first-generation Hercules aircraft from 1982, including three L100-30s, 10 C-130Hs, and eight stretched C-130H-30s. Several have been lost in service, and the fleet today consists of about 15 aircraft, including eight C-130Hs, and seven C-130H-30s.

A second LM-100J Super Hercules (7T-WJB) was delivered to Boufarik in late April after a stop-over at St John's International Airport in Canada. This was also second-hand, having first flown in 2017 as the second LM-100J. The aircraft had previously been used by Pallas Aviation as N5105A.

It has not been revealed whether the remaining aircraft in the order will be to LM-100J standard or whether they will be military versions, nor indeed whether they will be second-hand or new-build aircraft.

The US has also now approved the sale to Egypt of 12 Lockheed Martin C-130J-30 Hercules transport aircraft for \$2.2 billion, the sale having been announced by the US

Defense Security Cooperation Agency (DSCA). Egypt already operates a mix of about 21 legacy C-130s of 29 aircraft acquired in 1978, 1990, 2001 and 2004 respectively. These include three C-130H-30s and two VC-130Hs.

At least four of the aircraft have been written off in accidents.

Two are currently equipped to carry roll-on/roll-off electronic intelligence (ELINT) systems integrated by the Sierra Nevada Corporation in 2017.

The Egyptian C-130 fleet is operated by No4 and No16 Squadrons of the 516th Air Wing at Cairo East.

The C-130J is externally similar to the classic 'heritage Hercules' in configuration and general external appearance, but is a very different aircraft. It is powered by Rolls-Royce AE 2100 D3 turboprop engines driving Dowty R391 composite scimitar propellers, and the glass cockpit has modern, digital, avionics (including head-up displays for each pilot), allowing safe two-man operation.



The J-model has improved performance compared to the C-130E/H, including 40% greater range, 21% higher maximum speed, and 41% shorter take-off distance.

The new version enjoys a 20db sound reduction in the cockpit and offers a 50% reduction in maintenance technician-hours. The J-model is available in standard-length or stretched -30 configurations. The LM-100J is the civil equivalent of the C-130J.

Some C-130H aircraft have been upgraded to an interim standard, receiving NP2000 propellers. The NP2000 incorporates more electric and more intelligent technologies from UTC Aerospace Systems, including a digital electronic control system that improves speed holding and blade synchronization. These innovations provide greater comfort and safety for the crew, as well as enhanced fault diagnostics for aircraft maintainers.

The US Air Force plans to retrofit approximately 140 C-130Hs with NP2000 propellers and has ordered propeller upgrades for 83 C-130H aircraft. ▲

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Grounded: The entire fleet of 26 Saab Gripens is currently out of action following the end of a contract to support the type.
PICTURE: SAAB.

South Africa in the Gripen of a crisis

The state of South Africa's main combat aircraft fleet worsens as money runs dry. Alan Dron reports.

The steady deterioration in the ability of South Africa's Government to provide adequate budgets for the country's armed forces has reached a new low with the news that it is unable to fund a new support contract for the air force's Saab Gripen fighter aircraft.

South Africa received the first of its 26 Gripens from the Swedish manufacturer in 2008, helping it to maintain its reputation as one of the continent's best-equipped air arms.

For years, however, the capabilities of the Gripen force have diminished because of chronic cash shortfalls at the South African Air Force (SAAF).

For some time, many of the Gripens have been grounded. A small number have been taken out of long-term storage and restored to flying condition.

In the latest blow for the SAAF, a new support contract offered by Saab to keep the Gripens operational was deemed to be too expensive for the cash-strapped service.

Armscor, the arms procurement agency of the South African Department of Defence, is currently negotiating to reduce the price. In the meantime, however, the Gripen fleet remains grounded.

□ □ □ □ □

"Armscor has been engaged with numerous contract negotiations," the company told the South African Parliament's portfolio committee on defence and military veterans. "Due to changing SAAF requirements to suite [sic] the budget, the process is being restarted to ensure

that the future contract will ensure operational aircraft."

Armscor expressed concern that the current SAAF budget allocation has been inadequate for some time. One growing worry is that many of the air arm's fleet are ageing and require midlife upgrades, which cannot be funded.

The company added that the Gripen also needs a beyond-visual-range missile to be an effective air superior aircraft. The most likely candidate would be MBDA's Meteor but this, too, is likely to be outside South Africa's financial reach.

Of South Africa's 26 Gripens, 13 are unserviceable; two are beyond economical repair and 11 are in long-term storage.

The fleet of BAE Hawk lead-in fighter trainers is also heavily constrained, with just seven of 24 operational. However, enough money exists to keep nine flying until the end of the current contract in August 2024. ▲

KENYA SECURING ITS STRATEGIC PARTNERSHIP WITH THE US

Kenya has a growing importance as a security exporter and as a major US regional partner. Jon Lake reports.

Kenya is an important regional trading power and has been described as the first east African 'tiger' economy, enjoying healthy growth.

Unusually for an African nation, manufacturing is the third largest sector of the economy, accounting for 11% of gross domestic product (GDP).

While Kenya promises to form a critical component of Africa's economic resurgence, security challenges do threaten further growth, with regional instability and the steady spread of al-Shabaab – a Somalia-based Islamic insurgence group – posing particularly thorny problems.

During the African Air Chiefs Symposium in Rwanda, Kenyan Air Force commander, Major General John Mugaravai Omenda, noted: "The Horn of Africa is a troubled region, but Kenya is a safe haven. Any

insecurity in any country affects our stability, our security, and our economy as well."

He highlighted the value of Kenya's relationship with the US, saying: "We feel that the US is an international strategic partner who we should always be close to and should work closely with. Militarily, it's beyond just the hardware. It's about sharing of knowledge, information, tracking of events, and making sure that everything is in order."

For its part, the US has acknowledged four main security assistance objectives in Kenya: to professionalise the Kenyan armed forces; to increase Kenyan counter-terrorism and border security capabilities; to increase maritime security awareness; and to improve peacekeeping capabilities.

Kenya has participated in many US Africa Command

exercises and has served alongside American troops during UN operations. It was a member of the African Union mission in Somalia and is part of the new African Union transition mission.

It also stepped up to the plate when former US President, Donald Trump, ordered US troops out of Somalia in January 2021, offering to host US advisors working with countries in the region to fight al-Shabaab.

Kenya is also becoming a security exporter, conducting training and technological exchanges with Uganda, Tanzania, Zambia, Malawi, and Ethiopia.

Its importance may be gauged by the fact that it was one of four African nations to attend the Ukraine security consultative group meeting at Ramstein Air Base in Germany, putting it among 40 key US allies. ▲

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MWARI'S DRONE MISSION

South Africa's Mwari combat platform is being given a new role – hunting down high-flying uncrewed aerial vehicles (UAVs).

Alan Dron reports.

With the conflict in Ukraine having again demonstrated the increasingly important role of drones in modern warfare, South Africa's Paramount Group has introduced a new capability to its Mwari combat aircraft.

The multi-mission Mwari, which has been touted for roles such as border patrol and counter-insurgency, has now been equipped for the counter-UAV role.

The aircraft has been outfitted with a new missile suite that Paramount says will enable it to destroy medium-altitude long endurance (MALE) UAVs at heights of 20,000 to 30,000 feet.

Its new capability will enable the aircraft to take on a role that has previously required expensive, ground-based air defence systems, said Paramount.

The aircraft carries a sensor suite in its



New capabilities: The Mwari is being armed with air-to-air missiles to counter high-flying UAVs.
PICTURE: PARAMOUNT

interchangeable multi-mission system bay in the lower fuselage. This typically contains long-range optical and radar systems, a satellite communications link, ship identification system and real-time video.

□□□□□

Now, the aircraft can be equipped with what the company describes as new-generation air-to-air missiles with an engagement range of 4km, together with wing-mounted cannon pods for close-range engagements. Details of the new missile armament have not been revealed.

The Ukraine conflict has been notable for Kiev's use of Turkish-manufactured Bayraktar 2 UAVs, that have acted both as reconnaissance assets and have also launched guided missiles

against ground targets, notably Russian armoured vehicles.

Azerbaijan achieved similar success with its UAVs in 2020's war against neighbouring Armenia.

"Historically, prohibitive costs have restricted anti-drone systems targeting MALE drone threats," said Steve Griessel, Paramount Group's CEO. Mwari offered this new capability at a fraction of the cost of alternative systems, he added.

The company believes that the aircraft has considerable export potential, with a lengthy sortie duration – anything up to 10 hours at a loitering speed of 110kts, a figure that can be further increased with optional external tanks.

At the time of writing, Paramount was understood to be on the verge of announcing a first order for the type. ▲

COULD THE ROOIVALK BE DEPLOYED TO MOZAMBIQUE?

Is South Africa's Rooivalk attack helicopter heading for Mozambique's Cabo Delgado province? Sam Basch reports.

In his first official briefing on the military intervention in Delgao province, General Rudzani Maphwanya, chief of the South African National Defence Force (CSANDF), was cautious about confirming whether the Rooivalk could be used.

South Africa is part of the Southern African Development Community (SADC) mission in Mozambique (SAMIM) combatting ISIS-aligned Al Sunnah wa Jama'ah (ASWJ) extremist insurgents in the north of that country.

Besides South Africa, the SADC troop-contributing countries are Angola, Botswana, the Democratic Republic of Congo (DRC), Lesotho, Malawi, Tanzania and Zambia, in collaboration with the host country's armed forces.

Rwanda also supplied troops at the invitation of Mozambique.

The SANDF's Operation Vikela follows an extraordinary summit of SADC in Maputo, Mozambique,



All white: The Rooivalk in white livery for UN peace support operations.
PICTURE: SAM J BASCH.

last year. Initially South Africa's contribution consisted of special forces that have now been augmented with infantry, medical, engineer and counter-IED units.

SAMIM also has a maritime component that includes the South African Navy frigate *SAS Spioenkop*.

Whilst SAMIM has air assets, like transport aircraft, General Maphwanya was reluctant to divulge details on operational capabilities. Asked about the Rooivalk, he said: "We are not denying or confirming that we are considering deploying the Rooivalk or any other attack helicopters that SADC as a region has." ▲

Since 2013, South Africa's Rooivalk and Oryx medium transport helicopters have been deployed to the Democratic Republic of Congo (DRC) as part of the United Nations peace support mission MONUSCO force intervention brigade (FIB). The Rooivalk, in particular, was successful in routing rebel groups, earning high praise from the head of MONUSCO.

The Rooivalk was designed for tree-top level, all-weather, night-time operations, capable of delivering significant and accurate firepower.

While the ASWJ terrorists have been suppressed and the threat degraded, as General Maphwanya outlined, calls have been made for air support of operations in the dense forest terrain of Cabo Delgado. This was after some SAMIM losses, including a South African soldier.

Despite these losses, SAMIM achieved significant success. In addition to rescuing women, children and elderly men held hostage, it also destroyed ASWJ bases, killing numerous insurgents, and confiscated weapons and electronic devices that are now being analysed for intelligence data.

Major international corporations have been developing offshore natural gas extraction in northern Mozambique's coastal waters, operations that have been affected by the conflict. ▲



In demand: The Chengdu GJ-2 Wing Loong II is one of the Chinese UAV systems being acquired by Algeria.
PICTURE: ASDS.

Chinese UAV exports find plenty of new targets

Jon Lake looks at some of the major defence stories throughout Africa.

The ongoing war in Ukraine, and the 2020 conflict between Azerbaijan and Armenia, have dramatically highlighted the operational usefulness of armed uncrewed aerial vehicles (UAVs).

These kinds of systems were once exclusive to the US, and to a handful of 'top tier' US allies. But armed UAVs have proliferated in recent years as those nations who have not been allowed to buy armed MQ-9 Predators and Reapers have turned to Chinese and Turkish suppliers.

China is continuing to exploit US unwillingness to export armed UAVs, and its armed drones have, consequently, been widely sold, though they have not proved to be as operationally effective as the MQ-9, nor the Turkish Bayraktar TB-2.

The Chinese CH-4 is in use in Algeria, Jordan, Iraq, and Saudi Arabia, while the Wing Loong is in service in Morocco, Egypt, the UAE and Saudi Arabia.

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Algeria, in particular, has become a major operator of Chinese UAVs, having received five CH-3s for intelligence, surveillance, and reconnaissance (ISR), and five armed CH-4 UAV systems. These will now be augmented by five CH5 Rainbow drones, armed with anti-tank missiles and guided bombs, and by an unknown number of Wing Loong 2 UAVs.

Algeria is expected to have 60 UAVs in service by the end of the year.

In neighbouring Morocco, a \$500 million agreement has been signed for the supply of the state-of-the-art Israel Aerospace Industries (IAI) Barak MX air defence system.

Barak MX provides a single integrated solution



More wanted: Kenya is on the verge of acquiring further examples of the MD Helicopters MD530F following the delivery of six aircraft in 2020.
PICTURE: KENYA DEFENCE FORCE.

allowing the simultaneous engagement of multiple airborne threats, and it is configurable and scalable enough to be used against anything from small drones to ballistic missiles.

The system consists of three basic elements, including a battle management centre and three types of missiles for different mission types.

Further east, Tunisia is to receive four Cessna Grand Caravan EX ISR aircraft.

Textron Aviation will deliver the aircraft to ATI Engineering Services, which will equip them with an electro-optical/infrared sensor, operator console, video datalink, tactical radios and night vision goggles (NVG)-compatible lighting, before delivering them to the Tunisian Air Force.

The US Government has already supported

the transfer of 16 Grand Caravan EX aircraft to African customers since 2014, mainly via the foreign military sale (FMS) process.

Kenya, meanwhile, is looking to bolster its growing attack helicopter fleet.

Jordan supplied two AH-1 Cobra attack helicopters in 2017, and the UAE donated nine Eurocopter AS550 Fennec light helicopters to the Kenyan Air Force (KAF) in September 2019.

The US Government approved the sale of six MD530F attack helicopters to Kenya in May 2017, and these were formally inducted by chief of the Kenya Defence Forces, General Samson Mwathet, in January 2020.

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Now, following the 2020 delivery, Kenya is on the verge of acquiring further examples of the MD Helicopters MD530F.

The Kenya Defence Forces are looking to increase the number of attack helicopters on strength to support operations against al-Shabab insurgents and to support the African Union Mission in Somalia (AMISOM), as part of the KDF modernisation programme.

A US Army spokesman revealed that Kenya is among three countries to have expressed an interest in procuring new MD 530s, and that it could receive "two MD 530s on the production line that were originally procured for Afghanistan, but which are currently under a stop work order".

"We are working towards resuming production for Kenya as part of their next aircraft procurement," the spokesman added.

Kenya's attack helicopters are operated by the Joint Helicopter Command in Embakasi, Nairobi, and at Laikipia Air Base in Nanyuki. ▲



Far left – Retta Melaku:
“We will work to establish different manufacturing sites.”

Left – Kidus Melkamu:
“We want to manufacture high-quality products, maintaining international quality standards in accordance with safety regulations and requirements.”

PICTURES: ANTHENEH GIRMA.

PILLAR TALK

Ethiopian Airlines Group and Boeing have signed a strategic memorandum of understanding (MoU) enabling them to transform Ethiopia as an aviation hub. **Kaleyesus Bekele** reports.

According to Ethiopian Airlines chief operating officer, Retta Melaku, the MoU has four pillars. The first is industrial development in Ethiopia that focuses on the establishment of an aerospace industry in the country. “We will work to establish different manufacturing sites,” Melaku said.

The second pillar is advanced aviation training that will look to create new pilots, technicians and engineers.

The third focuses on educational partnership. Ethiopian and Boeing will collaborate to transform the Ethiopian Aviation Academy into a global-standard university that would serve both Africa and the Middle East.

The last pillar is leadership development. “As you know, in Africa the biggest challenge is lack of qualified and competent leadership. In our partnership with Boeing we anticipate developing the next generation of leaders for the African aviation industry,” said Melaku.

“Ethiopia is the biggest airline in Africa. In addition to serving our valued passengers, we believe that we should develop the aerospace industry and exploit the untapped potential of Africa and contribute to the rise of the African economy by using aviation as a tool.”

Established in 1962, Ethiopian MRO and Engineering Services has a rich experience of maintaining and repairing Boeing aircraft.

The MRO centre has six modern maintenance hangars and engine, component, avionics and mechanical shops. It also maintains Q400s and Airbus A350s.

The centre provides maintenance services for airlines in most African countries and to some Gulf carriers.

As part of its growing relationship with Boeing, in 2009

EGYPTAIR’S CAIRO BOOST

EgyptAir Maintenance and Engineering is now providing line maintenance services for Etihad Airways’ A350 aircraft at Cairo Airport.

The new aircraft type has replaced the Boeing B787 on four weekly flights from Abu Dhabi to Cairo.

Yehia Zakaria, CEO of EgyptAir Maintenance and Engineering said: “We provided the required training for our staff on the A350 and added it to our line maintenance capability list as part of our strategy to keep pace with our customers’ needs.” ▲

Ethiopian Airlines established a small aerospace manufacturing plant at its hub at the Addis Ababa Bole International Airport, which was capable of producing wire harness kits that are installed in all Boeing aircraft.

“We manufacture this wire harness and supply to Boeing. Actually, we are one of the best suppliers,” explained Melaku.

In 2017, Ethiopian agreed to expand the manufacturing capability. Instead of supplying only wire harnesses, it began producing small panels and other various aircraft components. “This is the first step we took to establish an aerospace manufacturing industry with Boeing,” Melaku said.

Kidus Melkamu, Ethiopian Airlines MRO managing director, said the Ethiopian aerospace manufacturing industry had now started working with Boeing to provide wire and wire bundles for the B777X – Boeing’s newest aircraft.



According to Melkamu, Ethiopian has established a joint venture with Sky Techno to manufacture insulation blanket, which is placed in the cabin and fuselage sidewall and insulates against the outside cold while suppressing engine noise.

“We manufactured one set of insulation blankets for B777 aircraft and Boeing is very satisfied with the quality. The second round is on the final stage. So we want to expand this business,” Melkamu said.

Recently, the MRO centre has received certification from the European Aviation Safety Agency (EASA) that authorises it to design small aircraft parts and do some modification work. “We are now a design-approved organisation and can make limited minor cabin changes. We are working to develop our designing and manufacturing capability,” Melkamu said.

“We want to manufacture high-quality products, maintaining international quality standards in accordance with safety regulations and requirements,” he added.

According to Melkamu, in addition to the MRO service, the aerospace manufacturing industry would be another line of business that could generate significant revenue. ▲

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The Africa Aerospace and Defence (AAD) exhibition and air show was officially given the green light in May 2022. **Guy Leitch** looks forward to the event.

Everything AADs up to a spectacular return



The 11th edition of AAD will take place from September 21-25 and will once again bring together aviation suppliers from across the world to exhibit the latest technological innovations in the aviation and defence sectors.

AAD is the largest gathering of the aerospace and defence industry players and buyers on the African continent. It is Africa's only aerospace and defence expo that combines both a trade exhibition and an air show.

Held biennially at Waterkloof Air Force Base in Pretoria, AAD provides aerospace and defence companies with the most efficient and effective access to Africa's aviation purchasing, procurement and supply chains.

AAD organisers say that the exhibition provides a conducive environment for business-to-business links, as well as strategic platforms to engage in dialogue and discourse on international defence, aerospace and other related best practices.

Planning for AAD 2022 is well under way, with more than 50% of the space already confirmed and countries such as the US, Italy, Turkey, Belgium, China, the UK, India and Pakistan hosting national pavilions.

The US is expected to have a particularly strong presence, as is Turkey, with its key position in relation to the Ukraine war.

The theme for the 2022 show is 'exploring new paths, sharing solutions, showcasing innovation and capabilities'



Top: AAD combines an expo with an air show, where fast jets and explosions thrill the public.

Above: An SAA first officer explains a flight simulator to young visitors.

PICTURES: GUY LEITCH.

and the format remains unchanged, with the event keeping to the traditional three trade days and two air show days on the weekend.

AAD walks the tricky line of combining both the civilian and military sectors. This year there is a special emphasis on general aviation (GA) and the co-convenor is the Civil Aviation Association of South Africa (CAASA).

General manager, Kevin Storie, says that CAASA is providing a brand new GA hub at the forefront of the show. "This will boost the commercial and recreational side of aviation. The hub will provide direct access to a GA exhibition space and breakaway rooms for presentations. In addition, the Aero Club of South Africa gets its own outside display park for free," he explained.

At time of writing, the organisers were hopeful that the final sign-off would be obtained for a drone flying exhibition. This reflects the still growing demand for an exhibition to demonstrate the vast commercial and recreational opportunities in drone operations.

Storie said: "AAD is unique in that, unlike conventional air shows, it creates a powerful opportunity for the key players in general aviation to interact directly with buyers from all over the world, both from the civilian and commercial sectors. We are pleased to say that we already have more than 50% of the stands sold and almost all the key GA players signed up as exhibitors."

Exhibition director, Michelle Nxumalo, shared some of the key plans for AAD 2022, which includes diversifying the exhibitor profile to include a focus on new markets such as oil and gas, plus mining and energy.



AAD's youth development programme (YDP) is aimed at exposing learners to the complex technologies and innovation within the aviation and defence industries. This will be achieved through partnerships with industry organisations.

South Africa's Defence Minister, Thandi Modise, said: "AAD is an established platform, refined to suit business and marketing needs, which will undoubtedly yield a positive return on investment for participants."

In 2018 AAD hosted 486 exhibitors from 40 countries and 32,538 trade visitors from 112 countries. This year organisers expect more than 50,000 visitors plus some 300 accredited media. In 2018, there were 68 civil and military aircraft on display across the 54,000sqm of exhibition space.

AAD marketing manager, Nakedi Phasha, concluded: "Plans are in place to provide our exhibitors with a platform at which they can showcase their innovative resilience in addressing the Covid-19 pandemic, and their migration measures towards remaining sustainable in a post-Covid era." ▲

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The above mentioned courses are for external/international delegates.

The Aviation Africa Summit returns to Kigali in September.
But what's in store for the continent's premier aviation event?

Summit looking forward to the post-Covid era

As the last Aviation Africa Summit & Conference closed in March 2020 in Addis Ababa, the Covid-19 pandemic was closing in.

Within days, countries began shutting their borders, airlines stopped passenger flights, and the world wondered if we would ever travel again.

Two-and-a half years later and the world will, indeed, be travelling – this time to Kigali, the spectacular capital of Rwanda, for the 2022 event.

The summit anchors to the Rwandan city every two years and had been planned to take place in the first quarter of 2022.

“There were still a number of issues with the virus. Rwanda had strong protocols in place and, working with our partners in the Rwanda Government and the civil aviation authority (RCAA), we made the decision to push back to September – it was the right decision,” said managing director Times Aerospace Events, Mark Brown.

That decision has already been validated by sponsors, speakers, and delegates lining up to be involved as Africa opens its doors again.

The pandemic is still very much in the minds of all involved. Looking at aviation's resilience, recovery and growth in the post-Covid era, the conference is addressing many of the issues.

“Africa felt the impact of the pandemic more than many other parts of the world,” said summit chairman, Alan Peaford. “It is not necessarily about how the airlines and aviation support businesses survived, but more about what lessons were learned.”

The delegates will hear from key figures, including government ministers, airline CEOs, airport leaders, regulators... and even the president.

Since the last Aviation Africa in Kigali four years ago,



Hosting the summit: Kigali's Radisson Blu hotel and convention centre.

PICTURE: AKGERA AVIATION.

Top talks: Sanjeev Ghadia, CEO of Astral Aviation, and Colonel Silas Udaheemuka, director-general of Rwanda Civil Aviation Authority, will play key roles in the Aviation Africa discussions.

PICTURE: BILLYPIX.

Rwanda has developed closer aviation ties with the Gulf state of Qatar, with Qatar Airways Group heading a 60% stake in the currently under construction Bugesera International Airport, and a 49% stake in RwandAir.

Group chief executive, Akbar Al Baker, will be a key speaker at the summit and will face questions in an on-stage one-to-one interview with Peaford.

“There is a lot to talk about with so much happening in the aviation world and with Qatar at the centre of it,” Peaford said. “We'll include everything from Qatar's ambitions for Africa, through to its issues with Airbus, the plans for the FIFA World Cup, and coping with sustainability targets.”

Growth plans are key. Allan Kilavuka, CEO of Kenya Airways; Yvonne Makolo, CEO of RwandAir; and Sanjeev Ghadia, CEO of Africa's largest cargo carrier, Astral Aviation, will be heading an airline chief executive panel.

And, while many legacy carriers have stumbled, the way has been open for start-ups to begin their adventures too.

Gidon Novick, founder of LIFT, Kulula, and former CEO of Comair, headlines a panel looking at the challenge of entry barriers to the airline industry. He is joined by Nuno Periera, CEO of Bestfly, the rapidly expanding regional airline, helicopter operator, and business jet charter company in Angola. Leasing companies, bankers, consultants and manufacturer, Embraer, will also join the fray.

African Airlines Association (AFRAA) director general, Abderahmane Berthe; the International Civil Aviation Organization (ICAO)'s Barry Kashambo; and Nigeria's director general of civil aviation, Captain Musa Nuhu, will also be giving presentations.

Sustainability will be a major issue at the summit as Africa prepares for key events, such as the ICAO's triennial congress in Montreal, and COP 27 in Sharm el Sheik in Egypt later in the year, when the industry's plans to meet emission targets will be under scrutiny.

Issues on recruitment, retention, diversity and training will likely be emotive and controversial, while future flight discussions on innovation and how airlines can get involved in shaping the future will include delivery drone pioneers Zipline, Charis UAS, Rwanda's DG of civil aviation, Colonel Silas Udaheemuka, and manufacturer, Airbus.

Africa's challenges for maintenance and other aviation support will see EgyptAir, SAEI, Krimson, and AFI-KLM coming together to stimulate discussion across the sectors.

Business networking and direct meeting will also take place and exhibition space is 90% sold.

Aviation Africa is also co-locating with the Union of West and Central African Airport Managers (UGAACO) airport conference and a meeting of air chiefs.

The event takes place on September 12-13 at the Radisson Blu Hotel and Convention Centre in Kigali.

Details can be found at <http://aviationafrica.aero> ▲



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Challenges ahead as forecasters predict 20 years of growth

The 10th African Airlines Association (AFRAA) stakeholders' convention took place in Nairobi and Alan Peaford discovered there was optimism on the agenda.

Boeing and Airbus have both given African aviation a vote of confidence with presentations showing increases in demand for new aircraft over the next 20 years.

That demand will come from the underserved intra-Africa market, which Boeing's president Middle East, Turkey & Africa, Kuljit Ghata-Aura, said would be the largest growing African aviation market at 6.5% over the next 20 years.

He added that opportunities existed for more African countries to become involved in the manufacturing process.

For aircraft of 100 seats or more, both manufacturers were forecasting demand to increase the African fleet from the 2019 total of 680 aircraft.

Boeing sees demand for 1,030 new deliveries at a value of \$160 billion, while Airbus predicts 1,100 new deliveries. Half of today's African airliner fleet will remain with African operators.

Both manufacturers agree that single-aisle aircraft will dominate the orders to serve the intra-Africa market, presuming geo-political differences can be resolved and the implementation of the single African air transport market (SAATM), with eased border controls and reduced trade barriers, can be achieved.

Airbus sees a call for 860 single-aisle aircraft with less than 210 seats flying under the 3,000nm range. Boeing expects 740 single-aisles to add to the African fleet at a value of \$85 billion.

Both companies agree on demand for 240 twin-aisle jets, with Boeing predicting 90 of these will have more than 300 seats and a 5,000nm range.

Airbus airline marketing director for Africa, Joep Ellers, said data was showing encouraging

signs for Africa. The middle class (and the resulting ability to travel) would represent 75% of the population by 2040. Africa has the fastest-growing population in the world and had an economic growth faster than the world average.

Ghata-Aura agreed that the outlook was good but warned there were five key challenges to overcome.

He said that finance was still an issue and reducing risk and sharing the African growth story with investors was essential.

"I think there's a [poor] perception of Africa, in terms of financing, and we're working very hard to try and address those concerns. There is a great story about Africa; it's going to be very important to the growth to tell that story," he said.

The other key points were safety, competitiveness (achieving market liberalisation), operational efficiency, and the talent pipeline.

Boeing will be holding its first African operators' conference in Tanzania this month and Ghata-Aura said those points would be a focus.

"The forecast tells one part of the story, but I think that when you look at what some of the national governments are doing now to create this aviation infrastructure, it's really interesting," he said.

"If you look at Morocco, we've got a joint venture there that produces the wire harnesses for the 777. That is happening in other parts of Africa too. Ethiopia is a good example where they also want to create that infrastructure.

There's a lot of different countries that are very keen on developing their aerospace operations at every phase."

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Ghata-Aura sees real value in these partnerships.

"If you've got a national aspiration, that is really significant because, once you've got that, then you get a budget allocated," he explained.

"It's a very, very long-term, long-cycle business, and you're not looking for a return on investment in years one, two or three; you're looking at it much further down the line. But, with all the attendant benefits in terms of job creation, it also makes people feel proud about their national identity tied up with a national carrier, or a national champion in aerospace."

The Boeing regional president sees a key part of his job as helping to change perception about the role of aviation in Africa – especially among the financial community.

"I think you've got to recognise that, if people are going to buy aircraft, there's going to be a mix of direct purchase and lease. So, it's totally in our interest to speak to other finance parties about the growth story of Africa so they can understand that this could be an attractive market where they could see attractive returns because, ultimately, that's what they're looking for," he said. ▲

■ The 54th AFRAA Annual General Assembly (AGA) & Summit will be held from November 20-22 2022 in Dakar, Senegal.



Kuljit Ghata-Aura: "It's totally in our interest to speak to other finance parties about the growth story of Africa."
PICTURE: AEROCOMM.

Stakeholders, decision-makers, regulators and service providers, who gathered for the first face-to-face Airports Council International (ACI) Africa regional conference since the outbreak of the pandemic, pleaded for a full implementation of the single African air transport market (SAATM). Anuradha Deenapanray Chappard reports.



Putting pen to paper: The partnership is signed between ACI Africa and the Kenya Airports Authority.
PICTURE ACI AFRICA.

Why Africa needs an injection of liberalisation

The pandemic, its aftermath, and what could happen in the future, were the overarching themes of the March meeting in Mombasa, Kenya.

All speakers, participants and delegates discussed to what extent Covid-19 had affected the entire aviation industry and its ecosystem, including airports, air transport, and the supply chain.

They acknowledged the industry's resilience and the synergy between global organisations like the International Air Transport Association (IATA), the International Civil Aviation Organization (ICAO), ACI, and the World Health Organization (WHO) to bring the required support, guidelines, and data.

In Africa, air traffic dropped by 65.2% in 2021, and by 89% in 2020. According to IATA, due to the low rate of vaccination, air traffic will recover more gradually than elsewhere. It will reach 76% of the 2019 level in 2022 and will only exceed the pre-Covid level by 2025.

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Speakers addressed future challenges facing airports, ranging from safety, security, sustainability, decarbonisation, capacity-building, and the need to embrace technology and rethink business models.

As discussions progressed, it was clear that the pandemic was also a stark reminder of the vital role of liberalisation to solve hindrances (connectivity, visas, red-tape) in a harmonised approach, strengthening African airlines, helping air transport bounce back sustainably, and boosting local economies.

Angeline Simana, interim secretary general of the African Civil Aviation Commission (AFCAC) pointed out that, "the initial gains from liberalisation might be smaller in the short term but it would play a role in speeding up the recovery of

▼ It is estimated that full implementation could potentially increase intra-African traffic by 51% and frequencies on existing routes by 27%, decrease average fare levels by 26%, stimulate an additional 96,440 jobs in aviation and supporting industries, and enhance services through an additional 145 country-pairs. ▲

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traffic for the long-term development and robustness of African markets".

The SAATM, one of the flagship projects of the African Union, which seeks to create one single air transport market, liberalise civil aviation and drive economic integration, can undoubtedly act as a catalyst.

It is estimated that full implementation could potentially increase intra-African traffic by 51% and frequencies on existing routes by 27%, decrease average fare levels by 26%, stimulate an additional 96,440 jobs in aviation and supporting industries, and enhance services through an additional 145 country-pairs.

For that to happen bold, harmonised and viable actions and strategies are needed.

According to Emanuel Chaves, ACI Africa president, poor connectivity, protectionism, systems, and visa constraints were the major problems, while the SAATM, the African Continental Free Trade Area (AfCFTA), and the free movement of persons protocol (FMPP) were growth levers to ensure more partnerships, businesses, tourism, and competitiveness.

The conference heard that the post-pandemic era opens opportunities for Africa to unleash its full potential by fostering innovative solutions and new technologies (touchless biometrics) in airport processes for seamless travel and enhanced passenger experience. There's also a need to go green and promote sustainable aviation fuels (SAFs), renew ageing fleets, increase non-aeronautical revenues, minimise airport charges and fees, encourage public/private partnerships to upgrade infrastructures, airport operations and ground-handling, integrate air cargo to business models, and invest in skill development.

Ali Tounsi, ACI Africa secretary general, praised African airports for having responded stoically to the health and economic crisis. Also, while portraying the milestones during the 30 years of the association, he said: "It's not only time to take stock of the historical achievements, but also to assess weaknesses and find solutions to meet future challenges together." To mark its first three decades, the association launched a new online magazine.

ACI Africa once again took the commitment to help all airports through its unflinching support, advice, guidelines, initiatives (airport certification software), and tailor-made and affordable programmes, including the African airports development programme (AADP).

ICAO regional director, Barry Kashambo, stressed the importance of programmes like the airport excellence (APEX) in safety, APEX in security, airport collaborative decision-making (A-CDM) and airport carbon accreditation (ACA) in advancing airport standards.

During the event, ACI Africa signed partnership agreements with AFCAC and its airport members – Kenya Airport Authority, Limak AIBD Summa (LAS) SA Senegal, Sudan Airports Company Ltd (SACL) and Summa Airports (SA) Niger.

Progress will be assessed in Marrakech next October during the ACI Africa/World Conference and Exhibition hosted by the Moroccan Airports Authority (ONDA). ▲

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Recent work at Berbera International Airport in Somaliland has included a full refurbishment of the terminal building and the control tower, as well as investment in aviation security, ground-handling, firefighting vehicles, and connection of the airport to the city grid. **Chloë Greenbank** looks at the reasons behind the moves.

Somaliland's gateway to opportunity



Revamped: The new-look Berbera International Airport is unveiled. Top right: New passenger screening facilities. Bottom right: The Berbera Airport team.

PICTURES: BIAC.

Although Somaliland declared independence from the rest of Somalia in 1991, it is still not recognised by the international community. Despite this, it offers huge potential with its own currency, democratically elected leaders, a flourishing private sector, and a nascent tourism scene for those wanting to head off the beaten track.

Now the de facto state is striving to achieve economic progress through collaborations with willing investors.

Abu Dhabi-based Terminals Holding is one such company that is seeking to leverage the opportunity for growth in Somaliland through its subsidiary, Transport Infrastructure Services Ltd (TISL).

In November 2021, in collaboration with the Somaliland Government, it opened the renovated and upgraded Berbera International Airport.

The airport's revamp follows the recent expansion of Berbera's port by Dubai-based DP World, as well as the construction of a highway linking the city to the Ethiopian border and the development of the Berbera Economic Free Zone.

"Our company's mission is to provide a safe, secure, transformational and economically sustainable air transport gateway," said Terminals Holding's group director of operations, Dritan Gjonbalaj. "Our emphasis is on investing in emerging markets and creating value for our partners in the region. Where our competitors see a challenge, we see an opportunity."

On top of that, he notes that Berbera is a vibrant and fast-developing city, while Somaliland has a large diaspora spread throughout Africa, Europe and North America. Combined, these two factors are driving demand for direct connectivity.

"We believe there's huge potential for both passenger and cargo flights at Berbera and we are already working with different airlines to provide those travelling to and from the city with reliable and affordable air services," he said.

As well as all the recent works, the operator also collaborated with UK-based Systems Interface Limited

(SIL) to install a modern, fully automated VHF communications system, plus a solar-powered weather observation system (AWOS).

"We have also provided training for the operations team, who are all locally employed and are currently training our first batch of air traffic controllers from Somaliland in the UAE," said Gjonbalaj.

With the first scheduled flights with Ethiopian Airlines to Addis Ababa due to start as *African Aerospace* was going to press, Christine Ikambili Wamakonjio, a ground-handling specialist at Berbera International Airport, revealed: "We are already engaged with Ethiopian Airlines and are now in discussions with other carriers to serve the airport."

She added that while, initially, the routes served from Berbera would be regional, the plan was to develop the airport as a transit hub for east Africa. "We're also keen to optimise cargo operations and leverage opportunities from this sector," she said.



Her colleague, corporate affairs manager, Khalifa Ibrahim, added that Berbera is strategically located. "We are next door to Ethiopia and, with the recent development of the port, the airport is part of an important supply chain for the region. Hargeisa Airport in the capital is already a popular hub, so we know there is demand for air traffic. However, Berbera will be the only airport in Somaliland to operate 24/7."

The city's coastal location means Berbera is also a big fishing port and, with plans afoot to install cold storage facilities, the airport will facilitate more efficient export links for seafood and other perishable produce.

As for what will drive tourists to visit the region, Wamakonjio explained that, as well as being on the pilgrimage trail, Berbera offers beautiful, clean beaches, historical sites and a rich cultural history. "We are currently welcoming around 2,000 tourists and counting each month," she said.

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National Aviation Services (NAS), the largest ground-handler in Africa, is strengthening its presence on the continent by increasing its partnership with airports as part of its expansion plan. **Anuradha Deenapanray Chappard reports.**

NAS' SUSTAINED EFFORT IN AFRICA

NAS, the fastest-growing aviation services provider in the emerging markets, recently signed a strategic memorandum of understanding (MoU) with Transworld Aviation Limited (TWAL).

The companies are joining forces to improve ground and passenger-handling services at the Abeid Amani Karume International Airport in Zanzibar.

NAS already operates more than 50 airport lounges across the continent in Côte d'Ivoire, the DRC, Guinea Bissau, Kenya, Liberia, Mozambique, Rwanda, South Africa, Tanzania, Uganda, and Zambia.

"As we expand our presence in Africa, we continue to grow and develop our reach and services, not just to meet our customer expectations but also to exceed them," said NAS group CEO, Hassan El-Houry.

"We will contribute greatly with technology solutions, employee training, and safety certifications, such as the International Air Transport Association (IATA) safety audit of ground operations (ISAGO), which we have secured in all our major stations."

Liberia Airport Authority (LAA) has awarded an exclusive 10-year contract to NAS to provide comprehensive ground-handling services at Roberts International Airport (RIA).

According to Musa Shannon, chairman of the LAA board: "This partnership will greatly improve our technical and professional capacities at RIA and allow us to provide a world-class experience, while taking a major step forward in the aviation industry."

NAS and the Zambia-based NAC2000 Corporation have also launched the Pearl Lounge at Kenneth Kaunda International Airport (KKIA) in Lusaka. Located at the new terminal, the lounge is part of Zambia Airports Corporation Limited's (ZACL) efforts to upgrade international airports in the country.

NAS Colossal Aviation Services (NCAS) is also heralding a new outlook for aviation in South Africa through new systems, processes and procedures, including green technology solutions and paperless digital platforms.

Employment equity and gender equality are vital components of the company's development strategy to enhance local capabilities while building global competitiveness.



Hassan El-Houry: "We will contribute greatly with technology solutions, employee training and safety certifications."

PICTURE: NAS.

South Africa has launched a new \$5.79 million project on behalf of the International Civil Aviation Organization (ICAO) dedicated to monitoring space weather globally, and specifically for the entire African region. **Guy Leitch reports.**



Increased awareness: Space weather affects many aspects of aviation and will soon become mandatory in flight plans.

IMAGE: SANSA.

room displaying real-time data 24/7, and a 100-seater auditorium, as well as offices and accommodation for students.

Communications and navigation disruptions, as well as increased radiation exposure due to space weather, have been identified as a serious risk to aviation and this is why the ICAO has given notice that it will require space weather to become a mandatory component for flight plans.

A further core capability of SANSA is that it is recognised as an expert in magnetic technology applications to clients in the defence and aerospace industry.

SANSA provides:

- Real-time forecasting and monitoring of space weather;
- Space weather services such as high-frequency propagation forecasts;
- Communication and service coordination, particularly during periods of extreme space weather;
- Promotion of understanding of space weather and its effects; and
- Training solutions in HF radio systems, geophysical exploration and satellite, spacecraft and airline operations.

SANSA is also the national authority on magnetic technology applications for the defence, aviation and aerospace industry.

These applications contribute significantly to the work of private aviation companies, national airports, the South African Navy, and the South African Air Force.

□□□□□

With more than 80 years of experience in magnetic operations, SANSA's Hermanus facility offers state-of-the-art equipment and services. It operates a magnetically clean facility that enables the perfect calibration of landing compasses, which are used to calibrate aircraft compasses and need regular calibration and maintenance.

SANSA hosts regular training courses on how to execute a compass swing procedure, including background on space weather, geomagnetism, and Fourier analysis (the mathematics behind the procedure).

Calibrating aircraft compasses needs to be done in a magnetically clean environment and SANSA assists its clients in surveying an appropriate magnetically clean site on their own premises.

The organisation also offers the calibration of magnetometers or electronic compasses used for navigation and orientation in uncrewed aerial vehicles (UAVs) and satellites.

SANSA has designed and built a magnetic test bench to test an aircraft standby compass before it is installed into an aircraft, thus ensuring that it is equipped with a working compass before executing an expensive compass swing procedure.

A high-resolution local geomagnetic field is modelled across southern Africa using SANSA observatory and repeat survey data. The output of this model is used for navigational purposes by SANSA clients.

The outlook is bright for forecasting...

South Africa, through the South African National Space Agency (SANSA), was selected as an ICAO-designated regional space weather centre in 2018.

"Space weather" refers to the effect of the Sun on the Earth and is caused by solar flares, coronal mass ejections (CMEs), high-speed solar wind, and solar energetic particles.

When these components interact with the Earth's magnetic field, they can cause disruptions to aviation communications.

SANSA has been monitoring space weather since 2011, when it launched a space weather centre at Hermanus, outside Cape Town.

Now a new R90 million (\$5.79m) project has been started for the ICAO that will see new state-of-the-art structures dedicated to 24/7 monitoring of space weather for civil aviation globally, and specifically for the entire African region.

This latest ICAO designation means that a fully operational capability for the African region will be in place by late this year, along with advanced research capabilities in the space weather field.

Space weather impacts on the aviation sector have been identified to be in the areas of high frequency (HF) communications, satellite navigation and surveillance, satellite communications, and radiation exposure.

"The development of suitable products in each of these areas is at an advanced stage and will lead to an information service required for the mitigation of these impacts, which, in turn, will assist with the reduction in the economic impact to the sector," said Dr Lee-Anne McKinnell, SANSA managing director.

These upgrades include a space weather monitoring



Modern facility: The space weather centre will monitor space on a 24/7 basis.

PICTURE: SANSA.

Global communications company, Viasat, has launched its first real-time Earth (RTE) facility in Africa, located in Accra, Ghana. **Steve Nichols** reports.



Ghana station is a platform for growth

Viasat worked in partnership with the Ghana Space Science and Technology Institute (GSSTI), a government-based institution focused on coordinating all space, science, technology and related activities in Ghana.

It aims to bring new space opportunities and jobs to the region, while expanding Viasat's ability to deliver critical Earth observation and remote sensing data on-demand around the world.

With this new station, Viasat's real-time Earth (RTE) global network is now active in five continents.

Viasat RTE provides ground-station-as-a-service (GSaaS) capabilities in support of environmental, insurance, shipping, energy and government operations.

It is a fully managed, affordable ground network that supports next-generation and legacy geosynchronous equatorial orbit (GEO), medium Earth orbit (MEO) and low Earth orbit (LEO) satellites using the S-, X-, and Ka-bands, enabling operators to meet current and future data requirements.

Viasat's RTE satellite ground station facility is located at the Ghana Radio Astronomy Observatory, Kuntunse.

It includes a Viasat full-motion 7.3M S/X/Ka-band antenna and associated infrastructure. The antenna is currently ready to provide global satellite operators with the ability to perform telemetry, tracking and command (TT&C) capabilities, as well as rapidly download, stream and/or disseminate valuable satellite-based data in a timely and secure manner.

John Williams, Viasat vice president, real-time Earth,

said: "The new ground station is part of our strategic growth plan for a global RTE ground-service network, with prior operations already located in North America, South America, Australia and Europe.

"By working in partnership with GSSTI, we have opened a state-of-the-art facility, bringing jobs and economic growth to the region, while further differentiating Viasat's service through our ability to provide satellite operators with access to world-class antenna systems for high-speed RTE connectivity of payload data across a secure network."

Eric Aggrey, research scientist and project manager of Ghana Radio Astronomy Project, GSSTI added: "The development of Viasat's new antenna site has been an extremely positive opportunity for the people and economy of Ghana.

"We have positively grown our presence in the global space and technology sector and look forward to expanding our relationship with Viasat to bring additional new space opportunities, technologies and skill sets to Africa."

This is an important step for Viasat as it increases its global footprint. The company announced in November that it had entered into a definitive agreement to acquire Inmarsat in a transaction valued at \$7.3 billion.

It said then: "The combination will create a leading global communications innovator with enhanced scale and scope to affordably, securely and reliably connect the world."

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The complementary assets and resources of the new organisation will enable the availability of advanced new services in mobile and fixed segments, driving greater customer choice in broadband communications and narrowband services (including the Internet of Things – IoT).

The combined company intends to integrate the spectrum, satellite and terrestrial assets of both organisations into a global high-capacity hybrid space and terrestrial network in fast-growing commercial and government sectors.

Viasat said the aim is to deliver higher speeds, more bandwidth, greater density of bandwidth at high-demand locations like airport and shipping hubs, and lower latency at lower cost than either company could provide alone.

It is believed that the ground station in Ghana will not be used for in-flight connectivity connections at this time, but it is part of a roadmap to put more capacity around the world for future developments.

Viasat's next-generation satellite constellation, Viasat-3, will extend high-capacity coverage around the world, with more than 1Tbps of capacity available per satellite.

Now well established in the United States on Delta, JetBlue, Virgin America, and United Airlines, other Viasat in-flight connectivity customers worldwide include Azul, Aeromexico, SAS, El Al, Finnair, Icelandair, KLM, Neos, La Compagnie, and Qantas. ▲

VALENTINE'S PASSION FOR AVIATION

Profile: Valentine Duma
CEO & accountable manager at
Aves Holdings, Johannesburg

Unable to afford flying lessons, Valentine Duma enrolled in an apprentice aircraft fitter programme at Denel Aviation and, after completing the theory part of his training, he was accepted by Safair as an apprentice working on Hercules C-130s. That's when the real on-the-job learning began.

Within three years he had completed his trade test and moved from hangar to line maintenance, which opened up a whole new world. Soon he was chasing down and solving snags, dealing with customers, and travelling with the aircraft across Africa.

Duma was also finally able to obtain his private pilot's licence (PPL). However, he stopped flying training when he realised that his heart was in maintaining, repairing and managing aircraft rather than taking to the air.

In 2006, Duma received his aircraft maintenance engineer licence (AME). The first aircraft type on his licence was the Boeing 737-400 and this remains one of his favourite jets.



He found himself working at SAA Technical, specifically looking after Boeing 737-300s. Again, he excelled and was noticed by the Swiss company, Jet Aviation. They offered him a position doing VIP conversions on the B737 and B747s, as well as the Airbus A320 and A330 families.

While he was at Jet Aviation he was offered a crew chief position in Saudi Arabia, taking care of the Saudi Military C130 fleet, which he knew from his Safair days.

In 2013, he accepted a position as technical project manager at the cargo aircraft charter company, FlyAirstream Aviation, based in Nigeria. While there, he

was offered the role of project and compliance manager at Nevergreen, doing 'end-of-life' inspections on aircraft that had reached their life limit or were being parted out for spares. He performed these operations worldwide – from Japan, for Asiana Airline on their ageing fleet of A320s, to Nigeria on Air Nigeria Embraers.

Duma has acquired a wealth of knowledge and experience on all aspects of aviation and now feels confident to take on the very responsible task of being both the CEO and accountable manager of his own aircraft maintenance organisation – Aves Holdings. ▲

GUY LEITCH

Breaking the mould: Valentine Duma launched Aves Technics as the Covid pandemic broke.
PICTURE: GUY LEITCH

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Down to earth: The new ground station being installed in Ghana.
PICTURES: VIASAT.

▲ ALL IN A DAY

Didier Perrin

Marcelle Nethersole speaks to the regional leader at Collins Aerospace.

Can you tell me a little about the company?

Collins Aerospace is a leader in technologically advanced, intelligent solutions that help to redefine the aerospace and defence industry.

We dedicate our capabilities, comprehensive portfolio and expertise to solving customers' toughest challenges and meeting the demands of the global market.

The company employs more than 78,000 people in more than 300 locations worldwide.

Can you give examples of some company projects in Africa?

We are supporting the introduction of global navigation satellite system technologies like A-SBAS/LPV with the Agency for Aerial Navigation Safety in Africa and Madagascar (ASECNA).

SBAS/LPV leverages space-based navigation (such as GPS) and then further improves its accuracy through regional satellites, like the service that will be provided by A-SBAS.

In Africa, where less than 20% of runway ends are instrument landing system (ILS)-equipped, LPV will accelerate the growth of networks, while enabling aviation authorities in multiple flight information regions (FIRs) to reduce the risk of landing problems.

To put this into both an economic and environmental context, a single missed approach and go-around can result in half-a-tonne of CO2 emissions on a single-aisle aircraft.

We are also proud to sponsor corporate social responsibility activities with the African Airlines Association (AFRAA), such as the youth in aviation event organised in Nairobi at Kenya Airways Pride Center on May 7.

The event was held under the theme 'redefining the future of Africa aviation'. A total of 132 students from seven schools in Kenya attended this programme. It was a very rewarding and successful event that we will continue to sponsor going forward.

The company is present in nine African countries. Are there plans to expand further in the region?

Collins Aerospace is present across the continent, for example in Morocco, Kenya and South Africa. Our plan is to continue to expand our presence over time, as we know relationships are critical to do business in Africa.

We see Africa as a growth continent of the future. It has more than 700 airports and in excess of 400 airlines, with an aviation industry that supports around 6.9 million jobs and \$80 billion in economic activity.

Africa is set to become one of the fastest-growing aviation regions in the next 20 years with an annual expansion of nearly 5%.

Africa needs aviation and Collins Aerospace can bring innovative solutions to support its growth, while meeting the air transport industry goal of net zero CO2 emissions by 2050.

Does the company face any challenges working in Africa?

Ease of travel within the continent is not at the level of connectedness that it could be; a lack of liberalisation affects connectivity and ticket costs.

There are many opportunities to create direct flights/routes utilising technology such as satellite-based communication and navigation systems, all-weather operations and digitalisation.

Some of this technology would enable more direct flights, which will be good for the African economy and, of course, mean more time spent meeting with customers.

What is next for the company?

We are redefining aerospace. We will continue to innovate and deliver industry-altering solutions for our customers, as well as shape the future of aviation to meet the air transport industry goal of net zero CO2 by 2050.

In Africa, we will also continue to support the implementation of the African Union Agenda 2063 and, specifically one of its flagship projects, the single African air transport market (SAATM).

What does a typical day hold for you?

One of my favourite quotes comes from Steve Jobs: "The only way to do great work is to love the work you do."

My job is not routine, there is not a single day that's the same. I love what I am doing every day, helping my team grow, resolve issues and win business. I also enjoy meeting with customers, understanding their needs, and bringing solutions to them. I can't tell you what tomorrow is going to be but I know it will be fun!



PICTURE: COLLINS AEROSPACE

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