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TAAG TEAM

« TAAG COMBAT L'ENNEMI INVISIBLE »

**ANGOLA CEO, RUI,
GRAPPLES WITH
THE UNSEEN
ENEMY**

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A person wearing a high-visibility yellow-green safety vest is shown from the chest down. They are holding a black headset with a microphone. A black mobile phone is clipped to their vest. A lanyard with a photo ID badge hangs from their neck. The ID badge has a photo of a man and the text "nexus GROUP". The background is a blurred outdoor setting with a blue sky and some orange structures.

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COVER:
Former Angolan Air Force
fighter pilot, Rui Carreira, is
CEO of TAAG Angola. He is
now masterminding the
airline's strategy as it
battles against Covid-19.
PICTURE: BILLYPIX

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magazine is published with
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African aviation must pull through – despite the Covid crisis

It has undoubtedly been the worst crisis to hit African aviation ever. Far worse than Ebola, wars across the continent, or the financial crisis.

African aviation had been preparing itself for growth – and instead it caught coronavirus.

Muhammad Albakri, the International Air Transport Association (IATA) regional vice president, told me that even in their worst projections they did not envisage the airline position being as bad as it was. IATA says 6.2 million jobs in Africa's aviation, travel and tourism industry could be lost – 400,000 more than previously estimated.

What worries Albakri, and many others involved in the aviation industry, is the devastation that is happening to the gross domestic product (GDP) in these countries. Billions of dollars are being lost.

Some governments, which appear not to be listening to the cry from the industry, must know that connectivity is embedded within their dreams of strategic plans for broad economic development and the betterment of people's lives.

A few of the most imaginative of countries, like Rwanda and Cote d'Ivoire, have taken the step to support – and promote – their vital connectivity lifelines. Others have remained frighteningly quiet.

Some of the stronger airlines have boxed smart. While Ethiopian has predicted losses of up to \$550 million between January and April, it converted 22 passenger aircraft into freighters and carried vital cargo. Its main shareholder – the government – is ready to step in to support when needed.

Of course, there are so many countries that have the 'egolines' – the airlines that have no commercial approach and merely carry the national flag.

For years there have been arguments for consolidation at best, or collaboration in a spirit of open skies, at least. Now, more than ever before, that is essential for sub-Saharan Africa to extract itself from the financial meltdown.

Already, as we see carriers collapsing, there are exciting new ventures waiting in the wings, unburdened by debt and ready to take advantage of the reduced aircraft prices. In this issue we meet some of these hopefuls.

Demand for air travel will return.

Connectivity between African countries is vital for the new tomorrow. Governments across the continent need to forget protectionism, using airlines as cash cows and ego boosts, and, instead, look to recognise the value of travel and doing all they can to make it work.

Alan Peaford, editor-in-chief



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Rwanda joins the Caravan club

Textron Aviation has been awarded a contract by ATI Engineering Services for two multi-mission Cessna Grand Caravan EX aircraft for the Rwanda Defence Force (RDF) in support of the African partnership flight initiative – a military-to-military engagement programme to build partnerships with various African nations and get them used to working with the United States, as well as each other. This will be the first fixed-wing aircraft to be put in service by the RDF.

The aircraft, which are anticipated to enter service during the first half of 2021, will primarily be based in Kigali, Rwanda.

“The Grand Caravan EX serves an enduring mission by providing transport, reconnaissance, and medical evacuation operations throughout Africa,” said Bob Gibbs, vice president, special mission sales for Textron Aviation.

“The aircraft is engineered for challenging missions, high payloads and short, rough runways, while delivering single-engine economy and simplicity. It is a perfect match for this mission throughout the US Africa Command (AFRICOM) area of responsibility.”

Fastjet to go private

African low-cost carrier, Fastjet, has de-listed from the London Stock Exchange’s Alternative Investment Market (AIM) – the global market for smaller and growing companies.

As *African Aerospace* was going to press, it was planning to re-register as a private company in a last-ditch bid to survive.

The move follows a demand from its major shareholder – Solenta Holdings – to withdraw from the AIM market, otherwise there would be no more financial support available.

The airline, which started flights in 2012, has been struggling with losses and, while it has retreated from markets including Tanzania and Mozambique, it has been facing continuing pressures – including the coronavirus crisis – affecting its remaining services in Zimbabwe and South Africa.

Bole ready to roll

Ethiopian Airlines Group has successfully completed a new passenger terminal at its Addis Ababa Bole International Airport hub, with emphasis on bio security and bio safety measures.

The new terminal has a check-in hall with 60 counters, 30 self-check-in kiosks, 10 self-bag drops, 16 immigration counters with more e-gate provisions, and 16 central security screening areas for departing passengers.

In addition, it has three contact gates for wide-body aircraft, along with 10

remote contact gates with people mover traveller, escalator, and panoramic lifts.

Kenya to cut pilots

Kenya Airways plans to remove half of its pilots as the Covid-19 pandemic continues to wreak its devastation on the airline

industry.

The airline is looking to cut up to 207 of its 414 pilot jobs, which account for almost half of the carrier’s payroll costs, over the next three years.

Kenya Airways Group CEO, Allan Kilavuka, said: “Based on our three-year projection, we will require 50-60% of pilots to

efficiently support the reduced operations. Our target is to reduce the company’s overall total fixed costs, not just staff costs, by about 50% in response to our revenue projections.”

New role for Albakri

Muhammad Albakri, the International Air Transport Association (IATA) regional vice president for Africa and the Middle East, is to be appointed the organisation’s senior vice president for customer, financial and digital services (CFDS), based in Geneva, from March 1 2021. Aleks Popovich, who currently holds the position, will retire.

Air accident move

Ghana is to establish an accident investigation and prevention bureau through its aviation ministry to improve air safety management.

Minister, Joseph Kofi Ada, said the bureau would have independence, with a clear mandate to investigate air accidents without interference. He added that a formal bill would be presented to parliament under a certificate of urgency to fast-track its passage.



Collins launches no-touch check in

Collins Aerospace has eliminated the need to physically touch kiosk screens during airport check-in and baggage drops.

The Raytheon business said that its new kiosk connect solution provides the first full, end-to-end, contactless airport journey – in high demand as passengers return to travel.

By simply scanning a code with their mobile device, passengers can quickly connect to a common use kiosk using either the airport’s public Wi-Fi or the kiosk’s built-in Wi-Fi, with no requirement to download any apps. From there, users complete the check-in process on their phones and produce boarding passes and bag tags without ever touching the kiosk screen.



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Face-covering flight appeal

The International Air Transport Association (IATA) is appealing to all travellers to wear face coverings during their journeys for the safety of all passengers and crew during the Covid-19 outbreak.

Wearing face coverings is a key recommendation of the International Civil Aviation Organization's (ICAO) guidance for safe operations during the pandemic, as developed jointly with the World Health Organization and governments.

IATA is emphasising the need for passengers to comply with the recommendation following recent reports of travellers refusing to wear face coverings during a flight.

Recovery under way

The commercial aviation industry's rebound from Covid-19 is under way, with the number of airline flights starting to gradually increase, but widespread recovery could take several years.

This is the consensus from a major industry poll conducted as part of FlightPlan: Charting a Course into the Future, an online broadcast by Inmarsat and the Airline Passenger Experience Association.

R-R takes next step in sustainability drive

Rolls-Royce has started its latest phase of testing on its low-emissions technology for its next generation of engines. An advanced low emissions combustion system (ALECSys) demonstrator engine – with technology that features in both the Advance3 and UltraFan programmes – has resumed ground test runs in Derby, UK.

Reducing emissions from gas turbines is part of the wider Rolls-Royce sustainability strategy, which also involves support for the increased use of sustainable aviation fuels (SAF) and intensive research into disruptive propulsion architectures and technologies.

The lean-burn combustion system improves the pre-mixing of fuel and air prior to ignition – delivering a more complete combustion of the fuel, resulting in lower nitrogen oxide (NOx) and particulate emissions.

The first series of tests began in 2018 and this latest phase will focus on validating emissions performance, engine control system software and functional performance.

■ Opportunity knocks for Rolls in Africa, page 46.



Despite bracing for a slow recovery, the poll reveals a sense of optimism for the industry's future, with digitisation expected to drive the return to profitable growth.

MEBAA date switch

The Middle East and North Africa Business Aviation Association (MEBAA) has announced that its show will now take place from February 22-24 at the Dubai World Central (DWC) Airshow Site.

The event was originally scheduled to take place from December 8-10 this year but was postponed due to concerns related to the evolving Covid-19 outbreak.

Secure walk-through

SITA and NEC Corporation have announced a global partnership to develop solutions that enable a secure walk-through travel experience at airports, leveraging NEC's I:Delight identity management platform together with SITA products Smart Path and Flex.

SITA and NEC will unlock the potential of next-generation passenger processing solutions, making mobile-enabled and touchless airport processes a reality. This will allow passengers to use their digital identity on their mobile phone whenever they travel at each step in the journey.

Passengers will use their biometric identity to check-in, make payments, drop their bag, as well as pass through security, immigration and boarding, by scanning their face at each step.

'Pioneer' award

Abdérhmane Berthé, the secretary general of the African Airlines Association (AFRAA), has been recognised for his work by a Greek transport organisation.

The *Air Transport News* (ATN) of Greece individual award was presented to Berthé in recognition of his efforts at the helm of AFRAA, which have culminated in him being named as a pioneer in the

African aviation industry.

Berthé said: "I am honoured to receive this award.

"I will not relent in continuous innovative efforts, with the support of the AFRAA secretariat, members and partners, to achieve significant transformation that will develop and sustain the airlines industry, while having a positive impact on economic progress across the African continent."

EgyptAir and Air Cairo codeshare

EgyptAir and Air Cairo have signed a codeshare agreement extending both airlines' networks to further destinations domestically and beyond Cairo Airport.

Captain Amr AbuElenin, Egypt Airlines chairman & CEO said: "The implementation of the agreement is scheduled to begin in the winter season 2020/2021.

"This step comes as part of EgyptAir's plan to achieve integration between the flight schedules of both airlines and offer more flying options for Air Cairo customers to the top leisure destinations in Egypt and to other destinations."

Bell Textron celebrates 85th anniversary

Bell Textron celebrated its 85th anniversary in August.

Founded by Larry Bell in 1935, the company has been at the forefront of innovation, from breaking the sound barrier with pilot Chuck Yeager and the incredible Bell X-1 plane, to developing the world's first tiltrotor aircraft.

Sameer Rehman, managing director, Bell Flight, said: "As we celebrate our 85th anniversary and applaud the innovations that have shaped us as a company, we must now look towards the future and ensure we continue to provide our discerning customers around the world with the very best Bell has to offer."

Bell currently has a suite of next-generation products in development, including the Nexus air taxi concept, which aims to revolutionise the urban commute.

■ All in a day, page 50.





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Former Angolan Air Force fighter pilot, Rui Carreira, became CEO of TAAG Angola in autumn 2018. No stranger to fast-paced mission-critical decisions, he is now reformulating the 80-year-old airline's strategy as it battles against Covid-19. **Victoria Moores reports.**

CARREIRA'S PATH...

"Miss flying, but outside the cockpit there are many challenges as well," TAAG Angola CEO Rui Carreira said, smiling at the recollection of his pilot days.

"Running an airline is also very exciting; it's high-pressure and stressful every day. This is my environment."

Carreira's aviation career began when he was just a teenager. At 18, he was called up for military service. After training in Russia, he became a Sukhoi Su-22 fighter pilot in the Angolan Air Force.

"Every child dreams about becoming a pilot. I had lots of dreams; being a pilot was one of them. The others were to become a doctor, or a construction engineer. But at that time Angola was at war, so I was obliged to go into the military. I chose to go to the air force and then became a pilot. It was simply like that."

After eight years flying military jets, 26-year-old Carreira left the air force in 1992 to become a civilian pilot with Luanda-based TAAG. He also flew Dassault Falcon 10s and 20s for Angolan business aviation company, SonAir.

"In 2008, I stopped flying and became a member of the TAAG board, as COO. In 2013, I went to the Civil Aviation Authority as deputy director general and then, in 2017, I became DG of the CAA. That was a very exciting job as well."

Carreira ultimately returned to TAAG and became CEO in autumn 2018. By late 2019, he and his team were making headway with the airline's strategy, despite the backdrop of an economic crisis in Angola. The country was

already battling high inflation and adverse exchange rates. Then the coronavirus hit.

Pre-Covid, the Angolan Government had started work on TAAG's privatisation, with hopes of completing the process by 2021.

The state originally planned to keep 51% of the airline but, by late 2019, this thinking was evolving and a majority stake could have been on the table. Qatar Airways was tipped to be among the potential buyers, but Carreira dismissed this as a rumour.

Meanwhile, Carreira and his team had been tasked with optimising TAAG's fleet and network.



The carrier used to serve both Sao Paulo and Rio in Brazil, but Carreira replaced the heavily seasonal and loss-making Rio service with an extra Sao Paulo frequency and a new route to Havana in Cuba.

The airline was also eyeing further long-haul routes in Europe, to join its existing services to Lisbon and Porto in Portugal, following its complete removal from the 'EU blacklist' in April 2019.

TAAG had been on the EU air safety list since 2008, but was allowed to perform limited operations during some of that time.

While the EU operating ban did not affect intra-African flights, Carreira said it had an impact on passenger confidence and also hindered TAAG's network strategy, because some African destinations only made sense if they connected to Europe.

"After we were blacklisted, the first release was to choose one destination in Europe. We chose Portugal," Carreira said. TAAG resumed flights to Lisbon and Porto.

With those restrictions now fully lifted, TAAG was hoping to add frequencies on its two Portuguese routes and launch new services to Paris and London, joining its codeshare flights to Amsterdam, Frankfurt and Paris, which are operated by KLM, Lufthansa and Air France respectively.

Even before the Covid downturn threw TAAG's plans into disarray, this network expansion would have required new long-haul aircraft. "Without new jets we cannot open new routes in Europe," Carreira explained.

TAAG has a long-haul fleet of three 777-200ERs and five 777-300ERs. Carreira was hoping to retain the latter and, from 2021, replace the 12-year-old 777-200ERs with eight new 787s – comprising five 787-9s and three 787-10s.

Originally, the main barrier to that aircraft order was financing – "states like to own aircraft", Carreira explained – but the pandemic means the carrier is now revisiting its overall strategy.

However, another part of TAAG's fleet plan remains intact. The airline's short-haul fleet was made up of four 737-700s and one 737-700QC, which were sometimes used to operate sectors under an hour, with low load factors.

"This is not an efficient operation," Carreira said. "We'll replace the 737s and we'll use them for longer regional routes, up to four hours."

In August, the airline took possession of two 737-700s from SonAir. "Despite it being a private company, all SonAir shares belong to Sonangol, a state-owned company," explained Carreira. "As SonAir is terminating its fixed-wing operations, those aircraft were purchased by TAAG, exercising its preferential right."

TAAG also announced an order for six De Havilland Dash 8-400s at the 2019 Paris Air Show and took delivery of the first aircraft on June 26, 2020, in the midst of the Covid crisis.

De Havilland Canada COO, Todd Young, said a 'delegated delivery process' was used to get the

SHINING A LIGHT ON NIGHT-TIME OPERATIONS

Before the crisis, TAAG had been calling for improved airport infrastructure in Angola, enabling operations to continue after dusk.

"Some airports have closed for night operations. It has a big impact on our operations, because we cannot afford to only have daytime flights, from sunrise to sunset. But there is a government plan for airport development and we have a couple of airports that already have capability to receive night flights. This number is increasing," Carreira explained.

TAAG operates intercontinental and regional flights 24 hours a day, but only four airports within Angola allow night operations to 2300 local time.

"For us, it would be good if every airport had night-flight capability. This way, we could use our fleet more effectively, because we believe that our fleet is underused," he concluded. ■



Rui Carreira: "Since the Covid-19 outbreak, we have been working under a lot of pressure."

ANGOLA NEARS SAATM SUPPORT

Angola is a high-cost country, which has not yet signed up to the single African air transport market (SAATM) initiative. However, Carreira is seeing signs of progress.

He said the government is looking to diversify the country's economy beyond oil production, which could benefit the aviation industry.

"We believe aviation can help this programme, so we are working to make our operations more efficient by pressing the government to reduce charges, taxes and also fuel prices," Carreira said.

"It makes sense. If you want to increase connectivity, the government has to take measures to promote the aviation sector."

Angola's president has also voiced a political will to sign up to SAATM, which aims to expedite air-transport liberalisation under the Yamoussoukro Decision (YD).

"Some laws must change, because they are very protective of the national carrier [TAAG]. We can then go to SAATM," Carreira explained. ■

aircraft to TAAG. "Amidst the current health restrictions facing many countries and the need for efficient regional aircraft to restart air services, we have developed a remote delivery process to support our customers' recovery efforts. Regional aircraft are proving to be the most important tools to support market recovery," he said.

These aircraft will be used to operate shorter sectors previously served by TAAG's 737s, providing feed for the carrier's regional and international flights.

"The Q400s wouldn't necessarily be used to start a new kind of business, but more to right-size the business," Carreira said. "We'll use them on our existing domestic network. We [normally] have 14 distributions within Angola, but that could grow with this aircraft, because it's suitable for shorter runways."

Before the crisis, TAAG had recently opened a new route to Sal in Cape Verde, and the Angolan carrier was planning to strengthen regional flights to destinations like Lagos (Nigeria), Accra (Ghana) and Abidjan (Côte d'Ivoire).

Through this network strategy, Carreira had hoped to narrow TAAG's \$135 million prior-year net loss to \$80-85 million and then return the airline to profit within three years. Likewise, passenger numbers were climbing from 1.3 million to 1.5 million year-on-year – but that was before the pandemic.

"Since the Covid-19 outbreak, we have been working under a lot of pressure," Carreira admitted. "We're obliged to make some changes to our strategy because the commercial environment has altered dramatically."

"Now, TAAG does not have the conditions to open new routes as planned. More than that, it must close some routes and reduce frequencies, even on very financially positive routes."

However, the Q400s purchase will still go ahead. "This will strengthen TAAG domestic and regional capacity, giving passengers more flexibility and opportunity to buy tickets at reduced prices, because this aircraft has lower operational costs," Carreira said. ■

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Cameroon's president has ordered that national airline, Camair-Co, should be prepared for privatisation. Alan Dron looks at how attractive the debt-laden carrier might be to external investors?



Cam and buy me...!

Long-range: Camair-Co's single Boeing 767-300ER is normally employed on the airline's long-haul route to Paris Charles De Gaulle Airport.

Selling off a state carrier is a difficult task, even when it is well-resourced and effective. Doing so when the airline has a huge debt burden and most of its aircraft are grounded through lack of maintenance will require a very special salesman.

Camair-Co has not made a profit since it began operations in 2011. Losses for the 2019 financial year were estimated at CFAF 15 billion (\$27 million), plus a further CFAF 12 billion for the first half of 2020.

In June 2020, the airline's auditors repeated a 2015 warning that shareholders might have to decide whether to close the company, given its debt mountain. Additionally, the auditors noted, staff were owed four months' salary and, in June, 65% of the workforce was placed on "technical leave" for three months because of the coronavirus pandemic.

Critics say that Camair-Co should have made much greater progress, pointing out that the airline has little or no competition domestically or in the immediately surrounding

region.

The airline's fleet – listed as a single Boeing 767-300ER, two 737-700s, two Bombardier Dash 8-400s and two Xian MA-60s – is believed to have been reduced to just one operational MA-60, with most of the others grounded for maintenance.

One of the Dash 8s, leased from Abu Dhabi Aviation, was at the time of writing at a Johannesburg maintenance facility and the subject of a legal dispute with the lessor over alleged defaults in lease payments, with repossession looming.

To improve the chances of an outside buyer taking a controlling share in the airline, the local media reported in June that the country's president, Paul Biya, had ordered an infusion of CFAF 15 billion for the company. This would be used to send one of the 737-700s for needed maintenance, the leasing of two engines to return the second 737-700 to operational status, and the acquisition of two more Dash 8-400s.

A source with close knowledge of Camair-Co, who asked not to be identified, told *African Aerospace* that the airline faced a struggle to find private companies prepared to take a stake in it.

"When you're privatising an airline, how do you become attractive to an investor? By having a track record – showing hard work, showing you've had success and showing that you're operating in an environment that will be fair to a private investor."

Camair-Co's long history of unprofitability, and now its problems with aircraft, would make that difficult, he said.

"If you're trying to privatise a company that's defaulting, it's going to be a very interesting person that invests in a company that's distressed. I don't see a traditional leasing company going in there for some time because of their record."

Nevertheless, there were still possibilities, he said. Cameroon's population of 27 million, together with its discovery of oil and gas, meant that the country should be as successful as Cote d'Ivoire. And the small west African nation of Togo had shown that it could create what he described as "a great little airline" in the shape of Askyl. ■

SOMMAIRE

VERS UNE PRIVATISATION DE CAMAIR-CO

Le président camerounais demande que la compagnie aérienne nationale Camair-Co se prépare à la privatisation.

Vendre un transporteur public est une tâche difficile même si elle dispose de ressources suffisantes et efficace. Elle l'est davantage quand la compagnie a une lourde dette et que la plupart de ses avions sont cloués au sol faute d'entretien ou de capacité de paiement de location.

Camair-Co n'a pas réalisé de profit depuis sa mise en service en 2011. En 2019, les pertes ont été estimées à 15 milliards de FCFA (27 millions de dollars), avec plus de 12 milliards de FCFA supplémentaires pour le premier semestre 2020. En juin 2020, les auditeurs ont réitéré un avertissement de 2015 selon lequel les

actionnaires pourraient être appelés à fermer la compagnie.

Ils ont également noté que les employés n'ont pas reçu quatre mois de salaire et qu'en juin 65% de ses effectifs ont été mis en « congé technique » en raison de la pandémie de Covid-19.

Le président Paul Biya a ordonné une aide de 27 millions de dollars pour augmenter les chances d'un rachat.

Pourtant Camair-co a peu ou pas de concurrence au niveau national ou dans la région proche. De plus, le Cameroun possède des atouts dont ses 27 millions d'habitants, le pétrole et le gaz. ■

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*Ibom Air is setting a new flightpath
for Nigeria's chronically
under-performing civil aviation sector.*

Martin Rivers reports.

SMART BOM



Before Covid-19 reared its ugly head, the International Air Transport Association (IATA) predicted that air passenger numbers in Nigeria would rise by 174% over the next two decades.

Its forecast came as no surprise to anyone familiar with the country's runaway demographics.

Nigeria already has the largest headcount of any African nation – 206 million citizens as of last year. With annual growth rates of 2.5%, *The Lancet* expects it to become the second most populated country in the world by the end of this century.

That will mean overtaking China, whose own population is set to nearly halve during the same period.

Yet, despite its rising fortunes, Nigeria is ill-prepared for the coming boom in aviation. There are currently no domestic airlines strong enough to compete on long-haul routes from the country, meaning the spoils of its growth are disproportionately accruing to foreign operators.



Blame for this missed opportunity is spread widely across Nigerian society.

In the public sector, successive governments have failed in their efforts to create a viable flag-carrier. Virgin Nigeria Airways operated for just seven years after launching in 2005, while Nigeria Air was abandoned as a project within weeks of its 2018 unveiling.

Nor has the private sector fared much better, with market leaders, Air Peace and Arik Air, facing endless financial scandals and accusations of poor governance.



George Uriesi: "Our footprint is definitely national, even if we are branded as a state-owned airline."

Still, among Nigeria's smaller players, there is one company giving cause for optimism.

Ibom Air launched in June 2019 with funding from the Government of Akwa Ibom, the country's largest oil and gas producing state.

It already deploys five Bombardier CRJ900s – a notable upgrade on the Boeing 737 Classics and McDonnell Douglas MD-80s flown elsewhere in Nigeria – and its bosses are determined to put the country on a new flightpath.

"For some reason, we haven't been able to

establish a world-class, successful carrier in Nigeria," admitted George Uriesi, the airline's chief operating officer and the former chief executive of the Federal Airports Authority of Nigeria (FAAN).

"It's [been caused by] a combination of factors. But I think the biggest one has been the management. These airlines are usually a one-man show. The people who own them, I think, sometimes struggle to differentiate between the company and themselves.

"We have chosen to go a different route. We are determined to put corporate governance up-front. Everything is for the airline, and everything is done in the interests of the airline."



Publishing financial statements that are audited to international standards is a crucial first step for the start-up carrier.

But transparency, alone, will not appease Nigeria's weary travellers, who have grown accustomed to poor on-board service, high ticket prices, and frequent delays and cancellations – at least, when flying with a domestic airline.

Management are, therefore, building the brand strategy on two key foundations: high on-time performance (OTP) rates, and convenient departure times. And on both fronts, it is the 90-seater Bombardiers that are winning over customers.

"So far, these CRJ900s have proven to be excellent aeroplanes," Uriesi said, noting the airline's 99% schedule reliability.

"Our gameplan now is to bring in more frequencies. Our competitors come in once a day

**Winning over customers:
The 90-seat Bombardier
CRJ900s.**



– so they’ll come in with a 130- or 140-seater – while we would do three frequencies a day. We are very comfortable carrying 60 people [on the CRJs]. If you have 60 people on a 737 on these routes, you’ll be out of business.”

Ibom Air currently operates a small domestic network linking four points in the country: capital city Abuja; financial hub Lagos; Uyo, the capital of Akwa Ibom State; and Calabar, the capital of Cross River State.

A fifth destination was due to be announced at the time of writing, with local media reports suggesting it could be Asaba International Airport, which is named after the capital of Delta State but also serves the much larger metropolis of Onitsha.

Asked why Akwa Ibom’s governor, Udom Gabriel Emmanuel, decided to launch an airline, Uriesi said it was a natural next step for an administration that has always focused on transport and infrastructure investment.

Uyo’s Victor Attah International Airport was opened by the state in 2009 and quickly attracted interest from local operators Arik Air, Air Peace, Aero Contractors and Dana Air.

To date, however, these airlines have only connected Uyo with their respective hubs in Abuja and Lagos.

“So one of the things the governor thought is, ‘Well, we can’t rely on anyone else’,” Uriesi recalled.

“The state built an airport. We might as well have an airline – but have it run in a professional, private sector-like way. That’s how the airline came about. And it is run independently. The government doesn’t interfere at all. They know not to come near the operation.”

Prior to the outbreak of Covid-19,

management had expected to grow the fleet to 10 CRJ900s within three years – including another two units by the end of 2020.

Those timeframes are now in doubt, but the overall shape of the business plan is not changing.

“We’re expanding organically. We’re not getting too excited,” Uriesi said, drawing a contrast with another Nigerian start-up, Green Africa Airways, which has a tentative commitment for 50 Airbus A220s, despite never having operated a single flight.



He identified Accra (Ghana), Libreville (Gabon) and Douala (Cameroon) as candidates for the first international routes from Lagos and Uyo. Overseas markets may also be served from Abuja – management are considering Niger, Chad and Burkina Faso – but probably not before the introduction of a mixed fleet.

“We anticipate having two [aircraft] types for a while,” Uriesi confirmed.

“We will have the CRJ900s, and then we would take on a very efficient, bigger aeroplane to do regional flying around west Africa and central Africa – maybe up to east Africa eventually.”

Praising the “flexible” design of the new terminal being built at Victor Attah International Airport, he said there is an opportunity for Uyo to become a “semi-hub” linking coastal central African states with Lagos, Abuja and other points in west Africa.

Equatorial Guinea, Gabon, Cameroon and São Tomé and Príncipe are considered the primary targets for inbound transfer traffic.

There is no denying that Akwa Ibom State

officials will have lobbied in favour of the semi-hub strategy. By developing transfer flows, Ibom Air will be adding routes from Uyo that would not otherwise be viable on a point-to-point basis.

However, Uriesi insisted that his team have the authority to make tough commercial decisions – even when it means turning their focus away from Uyo.

“We have two bases. The main base is in Uyo – that’s where our maintenance is carried out. But, as we expand, a lot more aircraft will be based in Lagos, because that’s the place that has the capacity to throw around the country,” he noted.

“Our footprint is definitely national, even if we are branded as a state-owned airline.”

Within a decade, he believes that Ibom Air can become the “most established regional carrier in west and central Africa”, unseating market leaders Asky Airlines, Air Côte d’Ivoire and Air Senegal.

Despite this grand vision, though, there is one segment the airline will not be pursuing – no matter how tempting it may be.

“We don’t have any long-haul ambitions at all – at least, not for the foreseeable future and not with this management,” Uriesi stressed. “Long-haul is where airlines go to die!

“We want a sustainable business model – an airline that’s built under the role modelship of Comair South Africa. They are a regional airline, but they are a world-class regional airline. They don’t have any long-haul ambitions. They’re just happy and comfortable to operate efficiently in southern Africa.

“And they have been profitable for 75 straight years. So that’s the model.”

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AEROSPACE REDEFINED

Better chances: Privately owned SA Airlink, which operates a mix of Embraer E190s (pictured), E170s and Avro RJ85s, is reckoned to have good prospects.



Cut back: SAA's long-haul operations have been reduced to a handful of Airbus 340-300s (pictured) and A340-600s. Modern replacements are required.



PLANED EDEMIC!

COVID-19 THROWS SOUTH AFRICA INTO TURMOIL

Historically, South Africa has been the continent's biggest aviation hub.

How will it fare with several of its airlines teetering on the brink of failure due to the global pandemic? Alan Dron reports.

Traditionally, South Africa has had a collection of airlines, plus a powerful air force. An infrastructure of support companies added up to a significant industrial sector.

Today, the air force, dragged down by years of underfunding, is a shadow of its former self. Emblematic South African defence and aviation company, Denel, has this year closed down its aerostructures business. And the airline industry – as in most nations – has been grievously affected by the Covid-19 pandemic.

Even the biggest and best-managed carriers around the globe have suffered severe losses.

Most will survive, although the consensus among analysts is that almost all will do so in a much-reduced form for the next few years, especially if a vaccine to the virus proves difficult to develop and distribute.

One airline that was barely surviving, even before Covid-19, was South African Airways (SAA). Having been kept alive in recent years only through repeated infusions of government cash, the state-owned company's position was so bad that, in December 2019, its board put the airline into South Africa's business rescue process.

Business rescue is the rough equivalent of the US Chapter 11 procedure, where a

company is given protection from creditors while its management – or, in South Africa's case, external specialists – try to restructure it so it can survive.

In recent years, SAA has suffered from a series of short-lived CEOs, corruption at many levels – a former chairwoman is currently facing such charges in court – and serious structural inefficiencies. The latter problem has been caused, at least partly, by the South African Government using the airline as a development tool rather than an efficient airline.

It has also come under increasing pressure from the Arabian Gulf carriers and Turkish, which have made no secret of their expansionist plans in Africa and are increasingly siphoning off long-haul traffic from southern Africa to their own hubs, depriving SAA of this valuable revenue stream.

The airline's fleet has become increasingly inefficient, with its long-haul services based around the Airbus A340, whose four engines give it fuel costs at least 30% greater than modern 'big twins' such as the Boeing 777 or Airbus A350.

Earlier this year, SAA briefly leased two A350-900s from Air Mauritius and it has been suggested that this type would be ideal replacements for the A340s – provided the necessary funding can be found.

The South African Government has been split over SAA's future. The Department of Public Enterprises, SAA's ultimate shareholder, wants the airline to continue, at least in some form. However, Finance Minister, Tito Mboweni, is adamant that SAA should no longer be a drain on the government budget. If it is to continue, any new funding should come from the private sector.

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In late August, the government said it had started negotiations with four groups that had expressed interest in buying a stake in SAA. The groups were not identified but the government has previously said it had received approaches from private equity firms and potential aviation partners; Ethiopian Airlines Group, Africa's most consistently profitable carrier, has previously suggested it could be interested in buying into SAA.

A senior South African source told *African Aerospace* that there was a general recognition in government and elsewhere, that SAA must continue, but that it had to change.

The source, who asked not to be identified, added that there was a determination that

There was a general recognition that SAA must continue, but that it had to change.

Continued on Page 22

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FIGHT FOR SURVIVAL

CONTINUED FROM PAGE 20

corruption and the armies of middlemen, who added their mark-up to the airline's supplies and increased its costs, should be a thing of the past.

There remained a role for a state-owned airline that acted as a vehicle not only for South Africa, but for the surrounding nations, he said.

The International Air Transport Association (IATA) agrees. "South Africa is an important market but also, when it comes to connectivity, it's one of the major hubs in sub-Saharan Africa," said Alex Stancu, who oversees IATA's operations in south and east Africa. Neighbouring nations, such as Botswana, Namibia, Swaziland and Zimbabwe "are very much dependent on South African policy, its economy and strategy as a whole".

The senior source argued that finding new aircraft to revitalise the fleet in the aftermath of the pandemic, with hundreds of airliners currently being returned to lessors by shrinking airlines, would not be difficult: "There's an awful lot of aircraft around."

They will be needed. According to South African aviation analyst and editor of *SA Flyer* magazine, Guy Leitch, the SAA fleet, by late August, had shrunk from 30-plus aircraft to just three Airbus A320s and five A340s. "What fleet is left is pretty much obsolete," he said.

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Despite this problem and the lengthy business rescue process, Leitch believed that SAA had a good chance of surviving: "I think the government is determined to keep the airline alive, despite huge criticism. They're determined to control state-owned enterprises."

It may be too late, however, for SAA subsidiary SA Express (SAX). In March, the government said it was unwilling to pump in any more funding and its business rescue practitioners declared that it was in such bad shape that it should be liquidated.

However, at the last gasp, SAX staff said they had received as many as 17 expressions of interest in the airline from outside parties. Most were interested purely in acquiring individual SAX assets, such as its Bombardier CRJ200 regional jets, engines and spares, but two were said to be looking at taking over the airline as a whole and reviving it.

SAA's problems can be contrasted with the performance of its low-cost carrier (LCC) subsidiary, Mango. For much of that time it has been profitable.

One of the reasons for its success has been its management team, headed by

CEO Nico Bezuidenhout. However, in August, in what is likely to be a significant blow to the company, Bezuidenhout announced his departure, apparently for the sake of his family, which has been affected by South Africa's high crime rate. He is departing for the quieter surroundings of Guernsey, one of the UK's Channel Islands just off the northwest coast of France, where he will head small regional carrier, Aurigny Airlines.

His departure will follow in quick succession from that of Mango's CFO and director of flight operations. How this departure of senior talent will affect Mango's performance remains to be seen. However, one school of thought suggests that a re-born SAA will concentrate on long-haul services, leaving domestic and regional sectors to Mango.

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Mango's LCC competitor is kulula.com, the LCC division of British Airways franchisee Comair.

Comair is scheduled to resume services on December 1, having emerged from its own business rescue process in late August after receiving a R1.5 billion (\$88 million) rescue offer from a consortium.

The former management team under former joint CEO, Glenn Orsmond, is returning. At the time of writing, the fate of CEO, Wrenelle Stander, was unknown.

Highlights of the plan include saving 1,800 of 2,200 jobs; retention of critical technical and flight operations skills; and the repossession of Comair's one B737 MAX 8, the return to the lessor of five leased MAXs and the reduction of Comair's fleet to 20/21 mostly-owned aircraft (Boeing 737-400s and -800s).

Other South African airlines, such as regional carriers SA Airlink and CemAir, also have good chances of surviving, reckoned Leitch, partly because of their very competent CEOs.

He regarded the overall South African airline picture as "complex", with a slow recovery path from the pandemic. He believed SAA would survive, but not without yet more funding from the country's government.

At present, he said, SAA had shrunk to the point where "it has lost its critical mass. It will lose the ability to connect with its Star Alliance partners."

Whatever is the future for South Africa's airlines, it is very apparent that the fate, not only of South Africa's air services, but also those of the entire southern African region are at stake. ■



Gabriel Olowo: "The present parasitic here today, gone tomorrow operations must end."

\$600M RESCUE PACKAGE AS RAM GOES INTO SURVIVAL MODE

Royal Air Maroc (RAM) is reportedly planning to reduce its workforce by around 30%, remove around 20 aircraft from its fleet, and streamline its network in America, Asia, Europe and Africa.

The restructuring comes in response to a 6 billion dirhams (\$649 million) rescue package from the Moroccan authorities at the beginning of August.

The assistance took the form of a capital increase and state guarantee to secure loans. Restructuring the airline was the price.

CEO, Abdelhamid Addou, said: "We are going to face an inevitable decline in demand for our activity over the next three to four years. Despite an increase in debt, the rescue plan will allow us to settle our liabilities and secure our commitments over the coming months. This is essential."

It had all been looking so good for RAM before the Covid-19 crisis hit.

According to Addou, the airline had recorded a 15% growth between November 2019 and February 2020.

Other indicators were looking good, with membership of the Oneworld alliance – a coalition of 13 world-class airlines – being completed in April.

However, the pandemic was devastating, with operations virtually shut down overnight.

After more than three months of total confinement, Morocco finally authorised domestic flights within the kingdom on June 23. RAM resumed its flights to Laayoune, Dakhla, Oujda and Agadir from its hub in Casablanca. It has since increased the number of frequencies and destinations.

It also launched a special flight programme in July to destinations mainly in Europe but also in the Middle East and Africa. ■



STRONG CARRIERS KEY TO FUTURE

Nigeria has a history of killing off airlines – more than 150 have come and gone in the last five decades and now the Covid-19 pandemic has put more under threat. But, as Chukwu Emeke finds out, all may not be lost.

Airlines showing signs of weakness before the Covid-19 pandemic will surely have either changed or died by the time things start to settle down again. That’s the view of Gabriel Olowo, president, Sabre West Africa, a US technology company for airlines and the travel trade, which presently hosts more than 55,000 travel agencies around the world and has more than 400 airlines in its inventory.

Olowo, who is also president of the Aviation Safety Round Table Initiative (ASRTI), Nigeria’s foremost aviation non-governmental organisation (NGO), believes Charles Darwin’s theory on the survival of the fittest will hold good in the current circumstance.

“The virus has now made attitudinal change from the carriers much more necessary, especially in the areas of cooperation, collaboration, consolidation and/or merger, in order to minimise cost and gain economies of scale on maintenance, insurance, fuelling, lease rates, handling, etc,” he said.

In the past, a multitude of factors had caused the high elimination rate among Nigeria’s airlines. These included the absence of good corporate governance, the insincerity of owners, a lack of sound business models, political interference in operations, and high operating costs.

Now, as Covid-19 remains at large, some observers fear for the future of the country’s local airlines.

Olowo, however, believes he has the recipe for future success. “This market deserves two or three strong carriers with a fleet of 25 to 50 aircraft, who will operate for competitive advantage and stand the test of time,” he said. “The present parasitic here today, gone tomorrow operations must end.”

Even though regulation has a critical role to play, Olowo believes nothing new is actually desirable, other than the enforcement of economic regulations clearly stated in the International Civil Aviation Organization (ICAO) standards and recommended practices (SARPs).

“A serious airline is actually self-regulated by subjecting its operations to higher standards than the minimum stipulated and to oversight by other jurisdictions outside its own domain,” he said. “This is the essence of an in-house quality assurance manager.

“An operator aspiring to operate outside Nigeria, having satisfactorily met with all the Nigerian Civil Aviation Authority conditions, should also subject itself to European Aviation Safety Agency (EASA) regulations, for example.

“A responsible operator sets itself goals for enduring operation, and not for fear of regulation,” he added.

Access to foreign exchange (FOREX), and high currency exchange rates, constituted huge challenges to Nigeria’s travel agents, airline operators, and other players in the sector long before the emergence of the Covid-19 pandemic.

“The exchange rate in Nigeria poses two major problems. The first is the high rate of fluctuation, which devalues earnings constantly and makes it difficult, if not impossible, to honour dollar-denominated contracts,” said Olowo.

“The government must create a special exchange rate window for aviation and ensure funds are disbursed directly to the payee, not the payer. This will nip in the bud the crimes of round tripping, money laundering, and diversion.” ■

Cash-strapped national airline, Air Namibia, has appointed yet another interim CEO while it looks for a permanent candidate. But, as Tom Pleasant asks, will he be a saviour or a scapegoat?

Aviation newcomer takes Air Namibia hot seat

Air Namibia’s board appointed Theo Mberirua as interim CEO in mid-July for an unspecified time – despite the government saying no appointment should be made while it investigates the flag-carrier’s realignment.

Mberirua is a newcomer to aviation, but he has considerable high-level experience with Bidvest, Standard Bank, and Telecom.

The airline has been without a permanent head for five years. Prior to Mberirua’s temporary appointment, bosses included outgoing Elia Erastus, the airline’s former head of human resources, and, before him, Mandi Samson, who resigned in March 2019.



No-one has been able to get to grips with the airline’s mounting debt, which it has been struggling to pay off for decades.

The exact amount is unknown, as the airline has not filed financial returns for several years. However, it definitely owes €25 million (\$29.5 million) to now-defunct Belgium-based Challenge Air, which applied to the High Court to have Air Namibia liquidated, a case that is still ongoing.

The airline told the government it needed \$469 million to pay debt, lease and operating payments just

to stay afloat for this financial year. The government, instead, only allocated 12% of that in June’s budget.

Last year, Namibia’s Finance Minister, Calle Schlettwein, said: “For the last 29 years, there was not a single year where Air Namibia contributed to the state coffers; it has never made money.” The country’s president, Hage Geingob, also suggested the end may be nigh for the airline. “We have a very serious problem with Air Namibia,” he said.



The Transportation Commission of Namibia suspended the airline’s scheduled air services licence in July, citing its financial instability. The commission’s chairwoman, Eldorette Harmse, said she did not believe it could “provide a safe, satisfactory, and reliable air service”.

Namibia’s High Court soon overturned the ruling, allowing the airline to continue flying. But the victory was short-lived as Covid-19 had, at the time of writing, required it to suspend all domestic flights.

The Windhoek-based airline has nearly 800 staff and a fleet of 10 aircraft, operating busy regional routes to Cape Town (South Africa), Harare (Zimbabwe) and Luanda (Angola), as well as its one intercontinental route to Frankfurt (Germany). ■



Theo Mberirua: Considerable high-level experience outside of aviation.

UN DIAGNOSTIC DES COMPAGNIES AÉRIENNES DE L'OCÉAN INDIEN

La pandémie du Covid-19 a durement touché les compagnies aériennes de l'océan Indien. Un tour d'horizon avec Anuradha Deenapanray et Vincent Chappard.

Plongées dans un « lockdown » depuis début mars, certaines compagnies aériennes redémarrent progressivement à l'instar d'Air Austral et d'Air Seychelles tandis que l'avenir d'autres comme Air Mauritius et Air Madagascar reste toujours incertain.

La compagnie réunionnaise est la première à avoir repris ses activités début juin 2020. Avant la crise, sa stratégie de diversification et de différenciation portait des fruits. Durant la crise, Air Austral a maintenu ses services et ses liaisons entre La Réunion, Mayotte et Paris. Elle a continué d'opérer des vols tout cargo et s'est également engagée dans le rapatriement de centaines de voyageurs bloqués au Maroc, en Afrique du Sud, à Madagascar ou à Maurice.

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La compagnie a obtenu un prêt de 86 millions d'euros pour le redémarrage de ses activités. Selon son PDG, Marie-Joseph Malé, les activités d'Air Austral devraient être impactées d'environ 50% pendant la période estivale et reviendraient progressivement à la normale (70 à 80%) fin 2020 pour la période hivernale.

« Notre marché va se redresser même si cela prendra un peu de temps. Nous allons poursuivre notre développement et notre connectivité avec l'Afrique », affirme-t-il. La livraison des premiers A220 est décalée vers mars-avril 2021.

Le trafic commercial a repris à l'Aéroport International des Seychelles le premier août.

« Toutefois comme les ports d'entrée du réseau d'Air Seychelles sont toujours fermés en raison des restrictions du



Prise de température à l'Aéroport International des Seychelles.

SUMMARY

HEALTH CHECK FOR INDIAN OCEAN AIRLINES

The vital air links in the Indian Ocean region have suffered a particularly serious 'hit' since 'lockdown' started in March 2020.

And, while some airlines like Air Austral and Air Seychelles are gradually re-starting operations, the future of others – like Air Mauritius and Air Madagascar – remains uncertain.

Air Austral is based at the Roland Garros Airport in the French overseas department of Réunion and it was the first to resume operations in early June 2020.

Before the pandemic, its strategy of diversification and differentiation was bearing fruit and, during the crisis, the airline maintained its services and connections between La Réunion, Mayotte and Paris. It has continued to operate all-cargo flights and has also engaged in the repatriation of hundreds of stranded travellers to Morocco, South Africa, Madagascar and Mauritius.

The company obtained a loan of €86 million (\$102m) to restart its activities. According to its CEO, Marie-Joseph Malé, the carrier's activities are expected to be affected by about 50% during the summer and gradually return to normal (70-80%) by the end of 2020.

He continued: "Our market will recover, even if it takes a little time. Delivery of the airline's first Airbus A220s is expected to be delayed until Q2 2021."

Commercial traffic resumed at Seychelles International Airport on August 1. "However," explained Air Seychelles' CEO, Remco Althuis, "as our network entry ports are still closed due to Covid-19 restrictions, we cannot predict when the airline will resume its business operations."

"We remain focused on consolidating our cargo business and are also continuing repatriation flights in the region, while providing ground services to airlines serving the Seychelles International Airport."

Air Seychelles has been serving its domestic network between Mahe and Praslin since early May this year.

Further south, in Mauritius, the borders have been closed since last March but preparations are under way for a full reopening of SSR International Airport at the end of October. Currently it hosts just repatriation and cargo flights. ■

Covid-19, nous ne pouvons pas prévoir à ce stade quand la compagnie aérienne reprendra l'intégralité de ses opérations commerciales », a déclaré Remco Althuis, le CEO d'Air Seychelles à African Aerospace.

La compagnie seychelloise avait transformé ses vols commerciaux en vol tout-cargo pendant la période de restrictions.

« Nous surveillons de près l'évolution de la situation à travers notre réseau et restons focalisés sur la consolidation de notre business cargo. Nous poursuivons également les vols de rapatriement dans la région tout en fournissant des services au sol aux compagnies desservant l'Aéroport International des Seychelles », souligne-t-il.

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Air Seychelles dessert de nouveau son réseau domestique entre Mahé et Praslin depuis début mai.

Plus au sud, à l'île Maurice, les frontières sont fermées depuis mars dernier. Les préparatifs sont en cours pour une réouverture de l'Aéroport International SSR en octobre 2020. Il accueille uniquement des vols de rapatriement et de cargo. Cela impacte lourdement le tourisme et l'économie nationale.

Air Mauritius se trouve déjà dans une zone de turbulence et s'enlise dans un imbroglio financier sans précédent. En avril dernier, la compagnie a été placée sous administration volontaire après l'effondrement de ses revenus. Des mesures drastiques (dont la baisse de 50% de son effectif) furent annoncées en juin dernier. Malgré le soutien de 175-225 millions de dollars de l'État prévu dans le budget 2020/21, la compagnie nationale enregistrera des pertes de 238 millions de dollars durant la présente année financière.

Les autorités malgaches ont repoussé à plusieurs reprises la réouverture des frontières. La compagnie nationale était à l'arrêt quand nous allions sous presse. La situation reste d'autant plus floue que la sortie définitive d'Air Austral du capital d'Air Madagascar a été officialisée en juillet dernier. ■



Malgré la crise du Covid-19 et les restrictions sur ses principaux marchés, Air Sénégal cherche aujourd'hui à se relancer et se développer. Un reportage d'Anuradha Deenapanray et Vincent Chappard.



Arrivée du premier A330neo d'Air Sénégal à l'Aéroport International Blaise Diagne.

Avant la pandémie du Covid-19, Air Sénégal avait entamé une nouvelle phase de son développement « extrêmement rapide et accéléré » en droit fil avec le projet Dakar Hub Aérien du Plan Sénégal Emergent de l'État sénégalais. Elle était la première compagnie en Afrique à prendre livraison d'un A330neo. Un deuxième est d'ailleurs venu consolider sa flotte. Air Sénégal reliait une douzaine de destinations régionale et desservait également Paris, Marseille et Barcelone. Londres, Genève et les États-Unis (New York et Washington) devaient être ajoutées en été 2020.

La crise sanitaire et économique a changé la donne. Après plus de trois mois de confinement, Air Sénégal a repris timidement ses activités le 20 juin avec la réactivation de la ligne domestique Dakar-Ziguinchor. Abidjan fut la première ligne internationale au départ de Dakar remise en service le 17 juillet dernier.



Si les vols de rapatriement ont été organisés avec Paris, le trafic commercial devait lui reprendre sur le marché européen durant la période estivale. Le marché européen est vital pour Air Sénégal où se trouvent la plus grande partie de sa diaspora et ses principaux partenaires techniques et financiers.

Or, le Sénégal ne faisait pas partie des quinze pays auxquels l'Union européenne a rouvert ses frontières début juillet. Le ministre sénégalais du Tourisme et du Transport aérien, Alioune Sarr, poursuit

Air Sénégal en quête d'un sursaut

ses négociations diplomatiques, souhaitant « une solution heureuse dans l'intérêt des deux parties partenaires ».

Les frontières sénégalaises ont rouvert le 5 août dernier uniquement aux citoyens de la CEDEAO, aux titulaires d'une carte de ressortissants des pays n'ayant pas imposé au Sénégal des restrictions d'accès de ses citoyens à leurs territoires.

La compagnie sénégalaise pilotée par Ibrahima Kane est profondément impactée par la crise et a besoin d'aide. Selon nos informations, le président sénégalais, Macky Sall, qui soutient Air Sénégal depuis sa création, souhaite sa relance. Le 21 août dernier, il a présidé une réunion sur l'avenir de la compagnie. « La relance 2020-2023 du secteur aérien nécessite dans cette crise, une adaptation de la situation économique de la compagnie, de sa flotte, des destinations et de son business plan. »

Le Sénégal a débloqué une somme de 149 millions de dollars (77 milliards FCFA) pour les acteurs du tourisme et du transport aérien. Un gel de la TVA a également été décidé. Ce soutien a permis de sauver plus de 100 000 emplois dont 300 chez Air Sénégal. ■

SUMMARY

AIR SENEGAL SEEKS SUPPORT AND REVIVAL

Senegal's national airline – Air Senegal – began 2020 with a well-defined strategy and now, despite the ravages of Covid-19, it's looking to revive its fortunes.

Early this year Air Senegal had begun a new phase of 'extremely rapid and accelerated' development in line with the country's 'Emerging Senegal' plan.

It was the first airline in Africa to take delivery of an Airbus A330neo... and then a second joined the fleet, connecting a dozen regional destinations and also serving Paris, Marseille and Barcelona.

London, Geneva and the USA were due to be added this summer – the European market being vital for Air Senegal because much of its diaspora and technical/financial partners are located there.

But then came the pandemic. ■

After more than three months of confinement, Air Senegal cautiously resumed flights on June 20 with the reactivation of the domestic route between Dakar and Ziguinchor. On July 17, Abidjan became the first international destination.



Senegalese president, Macky Sall, chairing a meeting on the future of the company on August 21 said: "In this crisis, the 2020-2023 revival of the airline sector requires an adaptation of the economic situation of the company, its fleet, destinations and its business plan."

Senegal has released CFAF 77 billion (\$149 million) for tourism and air transport. A VAT freeze has also been decided. This support has saved more than 100,000 jobs, including 300 at Air Senegal. ■

Ready for take-off: Sky Mali took delivery of its first Boeing 737-500 in March. Inset: Lucien d'Almeida – 42 years' experience, including 25 at Air Afrique.



Sky Mali launches into stormy skies

West African start-up, Sky Mali, was planning to launch domestic scheduled flights as African Aerospace was going to press. Tom Pleasant reports.

Sky Mali chalked up a major milestone on July 22 – receipt of its air operator's licence. The start-up had already taken delivery of its first Boeing 737-500 aircraft in March, configured for 102 people in economy class and 12 in business class.

Based out of Modibo Keita International Airport near Bamako, the airline was planning to start scheduled domestic flights in September, flying to Gao, Kayes, Mopti, and Timbuktu. Internationally, it is aiming to serve Malian communities in west and central Africa, in countries such as Cameroon, DRC, Gabon, Ghana, Mauritania, Niger, and Senegal.

For capacity on these routes, it intends to introduce a Boeing 737-800, two Embraer ERJ 145s, and two MA60s over the next two years.

More ambitiously, it is hoping for flights to Paris by 2022. Sky Mali has financial backing from the Emirati investment company, Al Sayegh Group (ASG), based in Abu Dhabi.

The head of ASG, Abdul Jabar Al Sayegh, said he decided to invest in the company due to the strong bilateral ties between the two countries. Abu Dhabi has been



providing extensive loans for social and economic development to Mali since 1976. Most recently, the emirate backed the large Taoussa hydroelectric dam, which includes extensive road, agriculture and aquaculture subsidiary projects.

Guiding the airline through its start-up phase is SMFI-Consulting (Stratégie Marketing & Finances Internationales), based in Cotonou, Benin. The company has additional offices in Abidjan and Mali. Its director, Lucien d'Almeida, will be Sky Mali's chairman. He has 42 years of experience in the airline industry, including 25 at Air Afrique.

The carrier's general manager, and the man who first floated the idea of the airline, will be El Hadj Baba Haïdara, who directed Air Mali from 2000 to 2002. That airline ceased operations in 2012 due to the northern Mali conflict.

That conflict continues to this day, just one of several external challenges the airline faces – not least the current coronavirus pandemic.

In 2012 the country effectively lost control of almost all of northern Mali, including the large cities of Gao, Kidal, and Timbuktu, to Tuareg rebels, who renamed the region Azawad.

Mali, itself, suffered a popular coup d'état in August this year, when President Ibrahim Boubacar Keïta was overthrown following allegations of mismanagement and corruption. The army was angry over pay and the ongoing fighting in the north.

SOMMAIRE

SKY MALI SE LANCE DANS UN CIEL ORAGEUX

Malgré un lancement retardé en raison de la pandémie, la start-up ouest-africaine Sky Mali a franchi une nouvelle étape dans le démarrage de ses opérations. Après la réception d'un Boeing 737-500 en mars, elle a obtenu sa licence d'exploitation aérienne le 22 juillet dernier.

Basée à l'aéroport international de Modibo Keita près de Bamako, Sky Mali prévoyait de lancer des vols intérieurs réguliers vers Gao, Kayes, Mopti et Tombouctou en septembre. À l'international, la compagnie desservira l'Afrique de l'Ouest et du Centre, et projette d'ajouter Paris d'ici 2022.

Sa flotte comprendra un Boeing 737-800, deux ERJ 145 et deux MA60 au cours des deux

prochaines années.

Sky Mali bénéficie du soutien financier de la société d'investissement émiratie Al Sayegh Group (ASG), basée à Abu Dhabi, pays qui accorde d'importants prêts au Mali pour des projets de développement social et économique depuis 1976.

Sky Mali bénéficie aussi des conseils de SMFI-Consulting (Stratégie Marketing & Finances Internationales), basée au Bénin.

C'est El Hadj Baba Haïdara, ancien directeur général d'Air Mali de 2000 à 2002 qui prendra les rênes de Sky Mali.

La compagnie démarre alors que le transport aérien vit la pire crise de son histoire et que le nord du pays connaît toujours des conflits.



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Julie Dickerson

Julie Dickerson
Chief Executive Officer

SES Fly Certain

Gidon Novick is best known for launching the low-cost carrier airline model in South Africa. Its zany kulula.com branding was revolutionary for the normally staid Comair. So, when Novick announced in July – in the middle of the Covid-19 pandemic lockdown – that he was going to start yet another South African LCC, people sat up and took notice. Guy Leitch reports.

NOVICK JOURNEYS INTO THE UNKNOWN

Gidon Novick joined Comair as a young chartered accountant with a fresh MBA minted in the USA.

In linking up with the carrier, he stepped into the very large shoes of his father, Dave Novick, who had headed the airline for more than 50 years.

The younger Novick completely defied the sceptics when his new kulula.com idea proved profitable from its inception and was responsible for most of the dramatic growth South Africa's domestic airline market has enjoyed.

After being joint CEO of Comair with Erik Venter until 2012, Gidon left the airline industry for fresh challenges – in loyalty programmes and then tourism and hotel funding.

However, like many airline CEOs, he has been unable to resist the siren call of the industry and, ever the visionary entrepreneur, he astounded industry watchers by announcing his plan to launch yet another LCC, despite it being the most difficult of times for the industry, worldwide and particularly in South Africa, which was enduring severe Covid-19 lockdown regulations.



Novick's rationale is that the entire aviation industry is going through a 'reset' and this creates opportunities.

Survival, more than ever, will be based on efficiency and avoiding the complexity that airlines inevitably accumulate over time. "This is a once-in-a-generation opportunity to start with a fresh, efficient and unencumbered business model," he said.

"If we have a super-efficient operation and the lowest costs, that will give us a competitive advantage. And, over time, that gives us a lot of security.

"The opportunity is now, because aircraft values are down around 40%. One of our key lessons from the current crisis is to avoid debt. We have managed to do that in all our other businesses and the airline industry will be the same. In the new post-Covid-19 world, it will be



Memorable: Novick earned his spurs by launching LCCs in South Africa using edgy advertising and memorable marketing, such as this 'Flying 101' paint scheme.

even more important that any kind of fixed overheads that put the business at risk must be avoided."

Although he wants the airline to be debt-free, he aims to own his own aircraft, as that is the most cost-effective method and enables the airline to be flexible through the lean periods.

Many airlines naturally vary their frequencies for peak and off-peak periods. Novick said: "A key tenet of our model is to be able to do that far more extensively, which means minimal fixed overheads."

As a businessman needing to impress sceptical funders, Novick has done feasibility studies and says that these confirm there is room for his new airline. He believes that funding will not be the most difficult of his challenges – testimony to the regard in which he is held by the industry.

He will focus exclusively on the Johannesburg (OR Tambo) – Cape Town route pairing which, thanks to South African airspace deregulation, has been one of the 10 busiest origin-destination pairings in the world.

In September Novick confirmed he had teamed with ACMI charter specialist, Global Aviation, which would bring two of its A320s to the venture.

"It's effectively Global's operation; it's their AOC, AMO and aircraft, but we have a joint

venture arrangement in terms of our involvement, bringing a lot of airline experience to support the branding, sales and marketing," Novick said.

The new airline is expected to begin operations in December.

When asked if he was going to include Durban to complete the Johannesburg, Cape Town triangle, he admitted that kulula.com had struggled with yields on that route, given that it is a short sector with competition from road travel.



And, when asked about using Lanseria Airport as an alternative for Johannesburg, he said that the new airline would concentrate on OR Tambo as that "is where the action is – where demand for domestic travel is centred, and there won't be issues with slots for a long time".

He is careful to not be charging headlong into a gap, which might not yet exist in this very uncertain market. "We are in no rush as the timing has to be right," he said.

He said the key advantage of starting an airline right now is that "there are great skills and talent available and aircraft can be obtained at extremely good prices".

Novick identifies three key challenges arising



“I can’t imagine that, in this climate, a large and established international airline would want to partner with an unknown start-up.”

GIDON NOVICK

from the Covid pandemic – the economic challenge; regulatory restrictions; and the perception of the health risk of travelling in a cramped airline cabin.

He admits that he does not know how long it will take for the industry to recover and, in particular, how long it will take before passengers start trusting the safety of flying from a health perspective.

He also accepts that the economic consequences of the Covid pandemic will have a severe impact on people’s ability to afford to fly.

Interestingly, he believes that business travel will be the hardest hit, due to many businesses having made the switch to video conferencing. He, therefore, acknowledges that the ‘new normal’ will be a much smaller industry, but he is confident that his experience in assembling a ‘lean-and-mean’ airline, as well as in the tourism industry, will enable him to launch a winning LCC.

This contradicts the other low-cost carriers in South Africa – kulula.com, FlySafair and Mango – which have long complained about overcapacity in the market, particularly since the arrival of FlySafair, with its fleet of 17 737s.

When asked whether his new airline would just be adding to the problem, Novick said he is

still hopeful that the South African Government will act rationally regarding its role in the industry. He, therefore, remains confident that a tightly cost-controlled and debt-free start-up will be a successful model.

Novick believes a key requirement for a successful airline is that it must be agile enough to navigate the inevitable tough periods. He is, therefore, committed to a minimalist model of cost-efficiency and simplicity.



Despite his previous experience, the new airline will not be offering a traditional loyalty programme. However, he remains committed to the travel trade and will be accessing broad distribution channels, including direct web-based sales, travel trade and online travel agencies.

Novick said he will start small and will be careful not to flood the industry with seats. He acknowledges there will be a multitude of challenges, including new biosecurity protocols and overcoming people’s resistance to flying.

A huge uncertainty remains as to when the South African lockdown regulations will be lifted sufficiently to enable free passenger movements for the airlines. At the time of writing, the South

African lockdown was at level three out of five. It was not expected that significant free movement would be possible before level one. Interestingly, kulula.com has said it will not be returning to the air before November.

The new airline will target all travellers. “The distinction between business and leisure has been blurring for a while, now, and Covid has accelerated this,” said Novick. “People’s work and private lives have become a lot more integrated.” Tourism remains the long-term focus. “Notwithstanding this major setback, South Africa is a globally competitive tourist destination and tourism is critical to our economy,” he said.

While Novick recognises the importance of code-sharing to feed and de-feed his routes, he says that he has no immediate plans for any sort of alliance, other than, perhaps, a very limited interlining arrangement. “I can’t imagine that, in this climate, a large and established international airline would want to partner with an unknown start-up,” he said.

Having just turned 50, Novick is proud to be what he calls “a middle-aged man with a combination of energy and experience”.

Given his track record, the new start-up will be one to keep a close eye on. ■

The Covid-19 pandemic could prove to be an opportunity for aviation entrepreneurs and one company in The Gambia has firm plans in place. **Hilka Birns** talks to the co-founder and MD, **Richard Powell**.

Gambia launch is no gamble

New west African regional low-cost airline, FlyWestaf, plans to launch in Banjul, The Gambia, next May, according to co-founder and managing director, Richard Powell.

After several years fine-tuning its plans, the start-up is negotiating with potential investors for \$20 million launch capital. Once the funding is secured, it will apply for an air operator's certificate (AOC) from The Gambia Civil Aviation Authority.

FlyWestaf intends operating five leased or bought turboprops – De Havilland Dash-8 Q400s being the most likely choice – from its main base at Banjul.

Its envisaged network includes Bamako (Mali); Dakar (Senegal); Bissau (Guinea Bissau); Conakry (Guinea); Freetown (Sierra Leone); Monrovia (Liberia); Abidjan (Ivory Coast); and Praia (Cape Verde).

To reduce reliance on passenger revenue post Covid-19, talks are under way with DHL for combined passenger and freight operations, revealed Powell.

"Because of the coronavirus, we are now in a very good position; we're not in debt, the costs of



An artistic impression of a FlyWestaf Dash 8 Q400.

acquiring aircraft have reduced significantly as there are a lot more on the market; and the competition is in a very difficult position.

"In a few months' time, when we have our airline up and running, the aviation market will have started recovering and the regional market will be quicker to pick up," he explained.

Powell says the start-up has done its homework, including meeting The Gambia President, Adamo Barrow, as well as tourism and trade stakeholders in the country.

Although it will be independent and privately owned, with no government shareholding, FlyWestaf will act as The Gambia's official

airline, said Powell. The country's flag-carrier, Gambia International Airlines, folded in 2007.

He says FlyWestaf plans to start slowly, expecting lower than 60% load factors in the first two years as aviation recovers from Covid-19.

Nonetheless, he believes the plan is viable and cites Emirati low-cost carrier, Air Arabia, as a model. "If we use the right aircraft, the right business model and data to manage the airline's performance; and if we have a good strategy, remain flexible and have the right experts involved, we can adapt our plans strategically as things move along."

Plans towards the end of 2022 include possible charters to London and feeding air links to southern Africa (South African Airways' new business plan includes services to Accra, Lagos and Gabon).



"The Gambia lost 50% of its tourism when Thomas Cook went bust and we would want to be in partnership with a tour operator eventually to serve that market," said Powell.

FlyWestaf will target a growing market of young west Africans under the tagline that 'everything is connected'. "We want to be funky. Africa has a young population and we want to support events that will help move young people around the continent, with links to media, music and film," Powell explained.

Using a dynamic pricing model, ticket distribution will happen through a mobile app, the airline's website and the travel industry.

While some progress has been made under the African Union's single African air transport market (SAATM) programme, protectionism and regulatory constraints remain a reality in Africa. However, Powell believes the African Continental Free Trade Area (AfCFTA) will come together, despite Covid-19 having temporarily delayed the implementation of free trade.

Powell's partners are start-up and turnaround consultant, Hamish Davidson, and airline pilot and operations manager, Chakib Ziani-Cherif. ■

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A number of African air forces are making significant improvements to their fighter and other capabilities.

Jon Lake
reports.



Fighter row: Egypt's SU-35 deal has upset the Americans.

FIGHTING FIT – AIR ARMS

NIGERIA

Air Marshal Sadiq Abubakar, the Nigerian Air Force Chief of Air Staff, has announced that his country will take delivery of three JF-17 Thunder multirole fighter jets during or before November 2020.

Abubakar made the announcement during a passing out parade in Kaduna for new Nigerian Air Force (NAF) recruits.

He also recently confirmed that pilots and crew for the new JF-17s had started their training in Pakistan. It is understood they are testing the three Block II JF-17s at the Pakistan Aeronautics Complex (PAC) at Kamra, where the aircraft were built.

Photos of the aircraft (which were credited to NAF pilots) were posted on Twitter by a Nigerian defence blog, showing them to be single-seaters, drawn from the current Block II production batch.

Known as the 'Thunder' in Pakistani service, and as the FC-1 Xiaolong (Fierce Dragon) in China, it has been reported that the Nigerian aircraft will use the name 'Blue Sapphire' or 'Neelum', while similar aircraft for Myanmar use the name 'Ruby'.

The order for just three aircraft may reflect a desire to acquire an initial batch of aircraft for training and familiarisation, pending a larger follow-on order. Alternatively, it could indicate a staggered purchase that could be funded

within existing Nigerian budgets, without taking out loans or lines of credit.

Any further Nigerian order would have to be for the new Block III variant.

Some have questioned the need for the JF-17. The Nigerian Air Force has found little use for the dozen Chengdu F-7NI fighters that it already operates, and its most urgent requirements are for close air support and counter insurgency capabilities. But, when Nigeria first began looking at the type, it stated a requirement for 25-40 of the new fighters.

EGYPT

Meanwhile, photos of the first batch of five Egyptian Air Force Sukhoi Su-35SE 'Flankers' have emerged after the aircraft stopped for fuel at Novosibirsk in Siberia, southern Russia on July 22. The fighters were en route from the factory at Komsomolsk-on-Amur to their final destination in Egypt, where they arrived on August 5.

Egypt reportedly signed a \$2 billion contract for 24-30 aircraft in 2018, after the US rebuffed its requests for the F-35 Lightning II Joint Strike Fighter.

The procurement represents the latest phase of an ambitious fighter modernisation plan, and follows the procurement of 46 MiG-29M and MiG-29M2 aircraft and 24 Dassault Rafales ordered in 2015. Egypt is now also negotiating a

deal with Italy that could include 24 Eurofighter Typhoons.

In April 2019, Mike Pompeo, the American Secretary of State, warned sanctions would be applied if Egypt purchased the Su-35, and, in November, the US Secretaries of Defence and State wrote a letter to the Egyptian Minister of Defence warning that the purchase would result in a response under the terms of the 'Countering America's Adversaries Through Sanctions Act' (CAATSA).

The Su-35S is the latest and most advanced variant of the Su-27 'Flanker', and is sometimes known as the 'Super Flanker'. The Su-35SE export version is fitted with increased thrust, thrust-vectoring NPO Saturn TRDDF 117S engines, and has a 'glass' cockpit with a new avionics suite. It uses a passive electronically scanned array (PESA) Tikhomirov NIIP N135 Irbis radar.

MOROCCO

Morocco, too, is purchasing new aircraft, but the planned upgrade of its existing fleet of F-16C/Ds to the new F-16V standard has reportedly been put on hold.

In March 2019, the US State Department cleared the Royal Moroccan Air Force to purchase 25 new-build Block 72 F-16C/D fighters, at an estimated cost of \$3.787 billion, and to receive an upgrade to its existing fleet of



Up and away: One of the JF-17s destined for Nigeria in flight.



Hold up: Plans to upgrade Morocco's existing fleet of F-16C/Ds to the new F-16V standard have reportedly been put on hold.



On its way: One of the two new gendarmerie H125 helicopters at Marignane prior to delivery in Morocco.



Angola-bound: Daher now produces the 10-seat Kodiak 100 (as supplied to Angola, front) and the six-seat TBM910/940.

CONTINUE TO POWER UP

23 F-16s – the survivors of 16 F-16Cs and eight F-16Ds originally delivered in 2010-11.

These were to be converted to the same standard as the new F-16s, under the Block 52+ F-16V designation, at an estimated cost of \$985.2 million. However, in August this year, there were reports that, while the purchase of the new-build aircraft was expected to go ahead, the upgrade had been put on hold. The reason has not been revealed.

The Block 72 aircraft are fitted with a Northrop Grumman AN/APG-83 scalable agile beam radar (SABR), and will be supplied with joint helmet-mounted cueing systems, making them much more capable than today's Block 52 F-16s.

They will be fitted with advanced digital avionics, including large format cockpit displays, and will feature an improved longer-life airframe. They will be supplied with Link 16 theatre datalinks, and armed with AIM-120C-7 advanced medium range air-to-air missiles (AMRAAMs), GBU-39/B small diameter bombs, and GBU-49 enhanced Paveway II dual-mode bombs.

The US Department of Defense placed a contract for the manufacture of 90 Block 72 F-16 aircraft on August 14. These will be manufactured by Lockheed Martin at its new F-16 assembly facility at Greenville, South Carolina.

The identity of the purchasers was not

revealed, but was understood to have included 66 F-16s for Taiwan's Republic of China Air Force, and the Moroccan aircraft.

The first shipment of 12 new Vipers for Morocco is due to begin in 2021.

Also in Morocco, Al-Darak al-Malikiy al-Maghribiy (the Gendarmerie Royale Marocaine) has been recapitalising its helicopter fleet, with seven new aircraft delivered in the last year.

These comprised a pair of new H125s, bought from Airbus Helicopters, and five second-hand EC145s, purchased from the Swiss Air Rescue service, REGA.

The royal gendarmerie is a paramilitary police service that reports to the Administration of National Defence (Morocco's defence ministry), and which operates a fleet of more than 20 helicopters – all of them from Airbus Helicopters and its predecessor companies, Eurocopter, Aerospatiale and Sud Aviation.

The gendarmerie air unit supports crime-fighting efforts – particularly in the anti-smuggling and counter-narcotics roles, but also performs search-and-rescue and air-sea rescue operations, coastal and fishing zone surveillance, border patrol, emergency medical airlift, and humanitarian and disaster relief missions, including fire-fighting.

The new royal gendarmerie H125s are equipped with emergency flotation gear on the landing skids, a rescue hoist above the port cabin door, and an underslung load hook.

ANGOLA

In another new move, the Força Area Nacional de Angola (FANA, Angolan National Air Force) has taken delivery of the first of an unknown number of Daher Kodiak 100 aircraft, which will be operated for the new Centro Integrado de Segurança Publica, (CISP, Centre for Public Security).

CISP was formed in December 2019, funded through a Chinese line of credit, intended to coordinate work by police and security agencies dealing with border control, public security and undertaking disaster response/relief missions across Angola.

CISP controls a network of security cameras and surveillance systems in Luanda and 16 provincial centres.

One aircraft was seen at Monchengladbach Airport in Germany in Angolan markings. This had earlier been converted for the cartography mission by SST Flugtechnik at Memmingen, with a dynamically stabilised cartography scanner, an operator console, and a 595 x 545mm fuselage cut-out covered by an automatic sliding door.

Further modifications were incorporated by Rheinland Air Service at Monchengladbach, including the installation of an unidentified pod under the starboard wing.

The aircraft was delivered to Angola in August as D-FSST, and was subsequently assigned the local serial R-756.

Production of Paramount Aerospace Industries' ground-breaking AHRLAC is about to be ramped up as the company prepares to emerge from the final stages of South Africa's business rescue process. **Alan Dron reports.**



AHRLAC back to business

Future prospects for Africa's first indigenously designed and manufactured combat aircraft have improved as it nears the end of almost 18 months in business rescue.

The process saw external specialists appointed to restructure a company at risk of failing, while it was protected from creditors.

The turboprop Advanced High Performance Reconnaissance Light Aircraft (AHRLAC) is designed as an airborne command post, integrating a variety of surveillance and intelligence-gathering equipment.

It is designed to be readily reconfigurable for multiple missions with sensors, such as radars and electro-optical systems, built into a unit incorporated into the aircraft's lower fuselage.

Proposed duties include reconnaissance, light strike, and armed overwatch of convoys or troops.

An armed variant of AHRLAC, known as Mwari, has also been developed and is designed to incorporate advanced intelligence, surveillance and reconnaissance (ISR) capabilities, together with weapons systems. It is designed to have operating costs of less than \$1,000 per hour, making it cheaper than helicopters and most other fixed-wing competitors.

Weapons options include guided munitions, guided rockets, air-to-ground missiles and a cannon pod.

The AHRLAC was conceived by Aerosud and developed with Paramount funding through a joint venture, Aerospace Development Corporation. (ADC).

However, a dispute between ADC's shareholders saw the programme enter business rescue in February 2019.

In October 2019, a rescue plan for the AHRLAC was adopted, under which Paramount Aerospace Industries acquired the businesses of ADC and its subsidiaries, including Aerosud Innovation Centre.

This led to the reopening of the state-of-the-art factory at Wonderboom Airport. This has now been operational for several months, with around 85% of ADC's staff being retained. Manufacturing is being ramped up for the delivery of production aircraft, according to a spokesperson.

Paramount has previously announced that it has received orders for the AHRLAC, but declines to give details of the clients' identities or the number of aircraft ordered, citing contractual confidentiality.

"We have been encouraged by the global interest in the aircraft and we look forward to making new customer announcements in the near future," said Alison Crooks, CEO of Paramount Industrial Holdings.

"Paramount's decision, more than a decade ago, to fund the development of the AHRLAC aircraft was a matter of national pride and came at a time when the local aerospace industry was searching for a project that would invigorate the sector. We're grateful that this strategic programme has now been secured and that we can now focus on a brighter future."

Almost ZAR 1 billion (\$58 million) has been committed

to the project so far, with more scheduled to be provided over the coming months as production gears up.

The first aircraft are now starting to emerge from Paramount's state-of-the-art facilities at Wonderboom Airport.

One potential application for the AHRLAC/Mwari is the US Special Operations Command (SOCOM) requirement for an 'armed overwatch' platform that can handle reconnaissance or counter-insurgency missions more cost-effectively than a highly expensive aircraft such



Continuing operations: Staff at the final assembly line at Wonderboom Airport are building the first production aircraft for customers.

Top: Paramount says that it already has orders for the multi-functional aircraft.

as the F-16 or F-35.

Diverting high-end aircraft to tackle bands of armed guerrillas is regarded as a waste of money and flying hours when such aircraft are increasingly required for training against potential 'near peer' adversaries.

SOCOM is said to be looking for up to 75 examples of a new aircraft over the next five to seven years to handle the armed overwatch mission. The aircraft may be supplied to allied nations, rather than being operated by the US.

US company, Leidos, is prime contractor, with Paramount Group USA and Vertex Aerospace as lead partners, in offering a version of the AHRLAC/Mwari under the name Bronco II. The original OV-10 Bronco was a Vietnam War-era counter-insurgency aircraft.

Three other aircraft – the Beechcraft AT-6E Wolverine, the Sierra Nevada/Embraer A-29 Super Tucano, and Air Tractor AT-208U – are competing for the contract. However, there is some opposition from members of the US Senate to the programme.



Flexible: S-Plane's equipment allows an aircraft to switch between piloted, remotely piloted, or completely autonomous modes.

Efforts to allow unmanned aircraft to fly safely in unsegregated airspace have taken a step forward with the aid of South African company S-Plane Automation.

Alan Dron reports.

When the pilot is just one option...

Somerset West-based S-Plane's X-KIT has been fitted to a Tecnam 2006T light piston-engined twin under Project Targus, where Spanish electronics company, Indra, is developing an optionally piloted vehicle.

X-KIT consists of the necessary automation, simulation, communication and ground control equipment to convert a piloted aircraft. "It's a core kit that we sell to various customers to take manned or unmanned aircraft and convert them to manned, unmanned or optionally piloted systems," explained S-Plane CEO, Thomas Jones.

"We provide all the equipment, but also all the services the clients need to make the necessary aircraft. Every aircraft is a little bit different."

X-KIT allows an aircraft to be switched between manual piloting, remote piloting (where it is controlled from the ground) and automated piloting (where the aircraft is completely autonomous, flying a mission via waypoints).

Flying an unpiloted vehicle in unsegregated airspace, where it can safely mix with piloted aircraft, is a major goal of companies seeking to increase the usefulness of unpiloted vehicles.

The modified aircraft undertook two weeks of flight tests in Galicia, northwest Spain, in June and July.

Flights were approved and monitored by the European Aviation Safety Agency (EASA) and the Spanish aviation regulator, AESA. No other newly developed unpiloted or optionally piloted aircraft has previously been granted permission to carry out such flights, noted Indra.

A test pilot carried out the take-off. Once airborne, he handed over control to a ground control centre.

Indra said that its strategy of developing a drone able to carry a pilot to take control if necessary "offers a great operational advantage for future users, who will be able to fly over urban areas or land at airports without restrictions when manned, and fly without a pilot when it arrives at the operation area. This dual use significantly enhances the commercial appeal and capabilities of Targus."

Development is scheduled to conclude this year. Indra sees the aircraft as suitable for a range of missions, including maritime patrol and environmental monitoring duties. ■

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Le ralentissement du trafic dans certains aéroports africains a été constaté dès la mi-mars, atteignant un quasi-arrêt en mai et en juin. Selon Ali Tounsi, secrétaire général d'ACI Afrique, « la manière dont le trafic se rétablira en Afrique reste incertaine » malgré la réouverture progressive des aéroports. Le point avec Anuradha Deenapanray Chappard.

LES DÉFIS DE LA RÉOUVERTURE DES AÉROPORTS AFRICAINS

Au 21 août, 33 États africains avaient rouvert leurs aéroports aux vols internationaux en mettant en œuvre une batterie de mesures (test PCR avant d'embarquer pour 27 pays ou à l'arrivée pour 19 autres et quarantaine pour 21 pays). D'autres s'y préparent. Le défi demeure le choix du protocole sanitaire pour une reprise sûre, efficace et durable.

« Il est évident que nous ne pouvions pas rester dans cette situation plus longtemps car de nombreux aéroports avaient épuisé leurs maigres réserves de liquidités en maintenant les installations aéroportuaires pendant la période de fermeture et en poursuivant les opérations de fret, d'aide humanitaire, de rapatriement et de vols d'urgence malgré le fait alors qu'ils ne recevaient aucun revenu », explique Ali Tounsi.



ACI Afrique appelle à une harmonisation au niveau des procédures et des protocoles sanitaires pour mieux gérer la reprise des opérations aéroportuaires, qui s'avère d'emblée compliquée pour les exploitants et les passagers.

« Les aéroports africains doivent mettre en place un plan opérationnel adéquat pour permettre la réouverture sûre et efficace des frontières aériennes et aussi revoir leur plan de continuité pour assurer une viabilité



Selon Ali Tounsi: Il est évident que nous ne pouvons pas rester dans cette situation plus longtemps.

financière. Cela nous rappelle que l'aviation est un secteur très vulnérable, à risque et volatile », affirme le secrétaire général d'ACI Afrique.

Selon le meilleur des scénarios, un redémarrage très lent est attendu au troisième trimestre 2020. La baisse du trafic s'élèverait à 55% pour les six premiers mois de l'année et à plus de 47% pour 2020.

Les prévisions montrent que les pertes en revenus des aéroports africains seraient « écrasantes » et pourraient atteindre 90% par rapport aux estimations d'avant la pandémie du Covid-19. Les pertes de recettes pour la région Afrique sont estimées à 2,2 milliards de dollars pour 2020, représentant une baisse de plus de 51% par rapport aux prévisions initiales de 4,3 milliards de dollars.

ACI Afrique, qui travaille en étroite collaboration avec l'OACI, l'IATA, les autorités de l'aviation civile et les partenaires de l'industrie, a publié un guide complet pour faciliter le redémarrage des activités dans les aéroports africains. Il les aidera aussi à mettre en place un plan de continuité de manière coordonnée, cohérente et efficace pour préparer la relance, et restaurer la confiance des voyageurs.

« Des opérations sûres et sécurisées à tout moment sont une condition préalable et essentielle au redémarrage des activités aéroportuaires et au développement futur du trafic aérien. Il convient donc de veiller à ce que toute stratégie de réduction des coûts en ces temps de crise ne compromette pas ces deux piliers prioritaires de l'aviation. »

Ali Tounsi souligne enfin que la relance du trafic aérien reflètera l'engagement et la détermination des partenaires de l'industrie à protéger « nos voyageurs, nos business et notre avenir ».

Il faudra en parallèle faire avancer l'application du SAATM pour ouvrir le ciel africain.

SUMMARY

RE-OPENING AFRICA'S AIRPORTS CREATES MAJOR CHALLENGE

The slowdown in traffic at some African airports was seen as early as mid-March, reaching a shutdown peak in May and June, according to Ali Tounsi, secretary general of Airports Council International – Africa (ACI Africa).

By August 21, 33 African states had reopened their airports to international flights by implementing a raft of measures. These included a virus test before boarding for 27 countries, testing on arrival for 19 others, and quarantine for 21 countries.

Others were still preparing their responses as African Aerospace went to press, with the challenge remaining to put in place the right health protocol for a safe, effective and sustainable recovery.

“Obviously, we could not stay in this [shut down] situation any longer as many airports had exhausted their meagre cash reserves by maintaining airport facilities during the closure period and continuing cargo, humanitarian assistance,

repatriation and emergency flights,” explained Tounsi.

ACI Africa called for harmonisation of health procedures and protocols better to manage the resumption of airport operations, which is complicated for operators and passengers.

“African airports must put in place suitable plans to enable the safe and effective reopening of air borders and also review their continuity plans to ensure financial sustainability. This reminds us that aviation is a very vulnerable and volatile sector,” said Tounsi.

The best-case scenario suggests a very slow restart in the third quarter of 2020, a 55% decrease in traffic over the first six months of the year, and more than 47% down for the whole of 2020.

Forecasts show that revenue losses at African airports would be “overwhelming” and could reach 90% compared to pre-Covid-19 estimates.



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*A row has broken over Nigeria's plans to hand over major international airport terminals to private operators. **Chukwu Emeke** reports.*

UNIONS COME OUT FIGHTING OVER NIGERIA AIRPORT PRIVATISATION PLANS



Up in arms: (from left) Frances Akinjole, deputy general secretary, ATSSSAN; Ocheme Aba, general secretary, NUATE; and Abdul Rasaq Saidu, secretary general, ANAP, at a press conference in Lagos to kick against the government's approach to airport terminal concessions.

When Nigeria's minister of aviation, Hadi Sirika, assumed office in 2015, he announced the government's plans to hand over some major international airport terminals to private concerns under concession arrangements.

The airports involved were Nnamdi Azikiwe International in Abuja, Murtala Muhammed International in Lagos, Port Harcourt International, and Kaduna International.

The ministry of aviation is proceeding with the concession processes but the various aviation unions, and some other stakeholders, are up in arms.

They question the appropriateness of the decision in the 'new normal' world ushered in by the Covid-19 pandemic, and accuse the minister of violating the standard procedures for such a venture.

As part of the required procedures for a privatisation process, a project delivery team (PDT), including representatives of the aviation unions, was set up by the government.



Subsequently, a certificate of compliance has been produced by the Infrastructure Concession and Regulatory Commission (ICRC). However, the unions claim they have had no involvement in the process that produced the certificate.

They also allege they have had no input into the appointment of a technical advisor for the project, which they claim has already been made.

Now the unions – the National Union of Air Transport Employees (NUATE), the National Union of Pensioners (NUP), the Air Transport Services Senior Staff Association of Nigeria (ATSSSAN), and Association of Nigerian Aviation Professionals (ANAP) – have made their case to the press.

In a joint statement signed by Ocheme Aba, Abdul Rasaq Saidu, and Frances Akinjole, who represent NUATE,

ANAP, and ATSSSAN respectively, the unions said rather than concession the airports, the government should adopt a greenfield approach that would allow new investors to handle the airports like fresh ventures and, consequently, undertake construction of new runways and terminal buildings, among others.

In addition, the Federal Airports Authority of Nigeria (FAAN) could be corporatized in such a way that the federal government retained 45% equity share, while the remaining 55% was broken down for public acquisition – the model adopted in some other countries in similar circumstance as Nigeria.

Sceptics of the government's proposed airports concession plan are apprehensive because of past experiences of private public partnership (PPP) arrangements that ended in prolonged litigations.



The first airport terminal build, operate and transfer (BOT) arrangement in Nigeria was at Murtala Muhammed International Airport terminal 2 (MMA2). Speaking at a recent webinar, Wale Babalakin, chairman of Bi-Courtney Aviation Services Limited (BASL), which manages MMA2, related his experience and issued a warning.

"Before another concession arrangement, it is important that the authorities decide to have a proper concession process," he said. "We have spent 13 years trying to enforce the MMA2 agreement. Today, we have only about 30% of our rights in the agreement executed and only about 40% of the scheduled traffic.

"Under the plan, by now, we should have finished phase 2 of MMA2. However, we were not given access to the land. Arik was claiming ownership, even though we had the agreement document. So, in doing a concession, please, follow the law, especially if the bidders are foreigners."

The ICRC's head of aviation, Yusuf Haruna, pointed out at the forum, which was organised by the Aviation Safety Round Table Initiative (ASRTI), that it was the first time the aviation unions had been represented on the PDT and that this had been at the request of minister Sirika.

In his contribution, Sirika said the concession was intended for assets to be improved upon.

"For a good product to be delivered to the people, it has to be given into private hands, while the assets remain with the Nigerian people," he stressed. "The government wants the best of services delivered to the people. The government has no money to do what a concessionaire should do."

Participants agreed that the planned concession was necessary but that the controversies surrounding previous agreements should be resolved before moving on to sign new concession arrangements, so that future interested investors would not be discouraged.



Pilgrims' progress: The expanded airport will include a separate Haj terminal for pilgrims heading to Saudi Arabia.

Tamale is hotting up

Work is under way on a major project to expand the northern Ghanaian regional airport of Tamale into an international facility. The city of Tamale has one of the fastest-growing urban populations in Ghana and the airport's expansion is designed to improve the economic prospects of what is primarily an agricultural region.

It is hoped that the airport's expansion will encourage air links to neighbouring countries such as Burkina Faso and Mali.

The work is being carried out by the Ghanaian Government through Ghana Airports Company Ltd (GACL), as part of the government's objective of encouraging regional hubs for its airports and seaports.

Tamale Airport has already been through an initial expansion phase, which saw the runway extended from 2,400 metres to 3,400 metres and its width from 45 metres to 60 metres, together with a taxiway and expanded apron parking. This has allowed the airport to accommodate wide-body airliners.



The latest expansion phase is also aimed at adhering to the International Civil Aviation Organization (ICAO) requirement that a country should have an alternate airport of similar capacity to its main air transport facility, to act as a diversion location in case of the non-availability of the main site.

The initial expansion at Tamale was carried out by Spanish construction company QGMI, which has now been engaged to undertake Phase II – a new terminal to complement the increased passenger capacity offered by the expanded runway. The latest expansion is being handled by its British subsidiary, QGMI UK.

The current terminal has a capacity of 200,000 passengers a year. The new terminal will double that to 400,000.

Work on Phase II began in July 2019, with construction getting under way in April this year. Completion is scheduled for the end of 2021.

The new terminal is being built in an undeveloped area of the site to improve the airport's configuration and is seen as the beginning of the development of a new airport city. In addition to the terminal, the project includes a Haj facility for pilgrims heading to Mecca, an access road, landside and airside roads, and ancillary facilities.

Construction of a new terminal at Tamale Airport in northern Ghana, is under way, while the country's main hub at Accra has become a critical centre for supplies to fight the Covid-19 pandemic.
Alan Dron reports.

QGMI said that the new terminal had been designed to ensure optimised passenger flows and a spacious feel, with the use of local materials being specified.

The design uses steel structures and the facade's materials can be disassembled and used in a further expansion should the passenger volumes grow over time.

The Ghanaian Government will pay for the project, which is financed by KfW Bank, backed by a UK Export Finance guarantee.

By August, the site had been cleared and prepared, with work under way on the terminal's foundations and the Haj facility, as well as earthworks and drainage for the access road and car parking.

The bulk of the terminal's metallic structure, cladding, facade and other structural elements, will start to be shipped from the UK to Ghana in mid-November 2020.

■ Meanwhile, in Accra, the country's government hosted the creation of a United Nations (UN) 'humanitarian hub' at the capital's Kotoka International Airport, handling both passengers and cargo. "These are needed to sustain humanitarian operations that millions of vulnerable people across Africa are depending on during this pandemic," explained UN World Food Programme representative and country director, Rukia Yacoub.

The first flight for humanitarian workers left Ethiopia's Bole International Airport for Kotoka on May 1, opening a new passenger aviation service between a network of regional hubs for the Covid-19 response.

The Accra hub helped to move humanitarian workers to areas where they were most needed, flying them to and from crisis areas amid reduced commercial flight availability and continued travel restrictions.

The regional cargo component of the hub is managed by the UN Humanitarian Response Depot (UNHRD) in Accra and received, stored and dispatched much-needed medical and other non-food items to 40 countries in and outside Africa.

Among the shipments arriving in Accra by military transport aircraft from countries as distant as the UAE and UK, were components for a field hospital that was strategically positioned at the UNHRD, from where it could be quickly dispatched to a designated country for its Covid-19 response. ■



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*Normally around 11 million passengers per year transit through Cape Town International Airport, making it the third largest in Africa. Now, as **Guy Leitch** reports, the airport has been brought to an almost complete standstill.*



Eerily empty: The wide open spaces at Cape Town International Airport.

Eerie journey out of lockdown

Visiting the airport under the lockdown is an eerie experience. The international departure and arrival halls are deserted, with row after row of check-in counters standing empty.

During the height of the crisis, uplift of JetA1 fuel dropped from 2.3 million litres per day to almost zero.

Prior to South Africa's lockdown restrictions, the airport was handling up to 40,000 passengers and 20,000 items of baggage in a day.

The restrictions have had a calamitous effect on the airport's revenue, but general manager, Deon Cloete, has remained positive. He explained that the Airports Company of South Africa (ACSA) had used the past months to develop new procedures and protocols to minimise the risk to passengers in anticipation of a slow return to flying in quarter four.

"The new protocols will require screening for all passengers. We have developed them in close collaboration with key industry players – non-ACSA airports such as Lanseria, local and international airlines, government and regulatory bodies.



"There has been a lot of learning, with regular updates and tweaking happening along the way. We also leaned heavily on best practices recommended by the likes of the International Air Transport Association (IATA), the International Civil Aviation Organization (ICAO) and Airports Council International (ACI).

"While it is still early days, we are confident that the new procedures have created the right spaces for safe passenger processing and facilitation."

With the slight easing of South Africa's travel restrictions in June, domestic flights for business purposes were permitted. These operated on the 'golden triangle' between Cape Town, Johannesburg and Durban. Later, flights to Port Elizabeth and Bloemfontein were also permitted.

The key requirement for an airport to be opened under South Africa's lockdown restrictions was that it met the health standards set by the department of health – particularly in regard to social distancing and pre-screening requirements. Compliance monitoring – health screening,

the wearing of masks, and adhering to social distancing signage and announcements – are handled at the airport by the full-time deployment of Covid specialist staff, who are easily recognisable by clearly branded jackets.

At the time of writing, the take-up of flights for domestic business purposes had been disappointing, with total demand less than 10% of pre-Covid levels. Within the almost deserted Cape Town concourse, information boards showed barely 10 arrival or departure flights per day.

Cloete believes that information technology (IT) will play a key role in future. "Specialised IT teams at ACSA are exploring the upgrade of current CCTV systems and technology that could potentially further scan passengers moving through the airport for any sign of fever or high body temperature. This will be in addition to the current cameras and temperature screening equipment already deployed at all access points into the terminal," he said.

While it remains important to keep exploring the best methods of containing Covid, Cloete reiterated that the actual systems deployed to date are already effective in ensuring safe staff operations and passenger processing.

A compulsory requirement for passengers departing on domestic flights is to arrive at the airport at least two hours before departure, so personal screening procedures can take place.

"Travellers are required to make full and honest disclosures about their recent whereabouts and whether they have had any exposure or contact with people infected by Covid-19," Cloete explained.

At the security checkpoints, boarding passes and travel documents are scanned and checked without physical contact or handling of documents. Issuing boarding passes on-line encourages tech-savvy passengers to adhere to the no-touch check-in procedures.

For passengers who still need to check baggage, social distancing rules are rigidly enforced. The manned check-in desks are separated from each other by two unused counters.

In 2018, ACSA announced the launch of its long awaited R7 billion (\$395m) capex project. This included upgrades to the international and domestic terminal buildings. Under the Covid-19 pandemic the project has been suspended. Also under review is a proposed new 3,200-metre runway. ■



Deon Cloete: "We are confident that the new procedures have created the right spaces for safe passenger processing and facilitation."

Africa's largest carrier, Ethiopian Airlines, has more than trebled its cargo fleet as it battles to navigate through the economic storms created by the Covid-19 pandemic. Kaleyesus Bekele reports.

Freight takes the load as Ethiopian battles through the virus

When passenger traffic virtually disappeared in early March, Ethiopian Airlines management held a crucial meeting.

Unlike many other African carriers, Ethiopian hadn't suspended its operation. However, it had been forced to ground most of its fleet (around 90 out of 120 aircraft) due to the closure of airspace and stringent flight restrictions.

"We have gone through civil war, famine and epidemics like SARS, MERSE and EBOLA," said Tewolde GebreMariam, Ethiopian Airlines Group CEO. "We have also witnessed the turbulent time in the wake of the 9/11 terrorist attack in the US. But nothing has come close to the impact of Covid-19."

The airline estimated it had lost \$1 billion in revenue, with its operation reduced by 90%.

"In March, executive management members deliberated on the unfolding situation and decided that we should focus on our cargo operation," explained GebreMariam. "At that point, the market boomed."

The demand for air cargo surged as countries desperately sought life-saving equipment like facemasks, testing kits, and ventilators. Since March, Ethiopian has been



Tewolde GebreMariam:
"We are trying to reduce our cost as much as we can. But we have decided not to lay off our employees."

transporting lifesaving equipment from China to Africa, Europe, the US and South America.

"Personal protective equipment (PPE) had to be transported by air because speed was vital to save lives," said GebreMariam.

Ethiopian Cargo and Logistics Services, one of the eight business units of the aviation group, operates 12 freighter aircraft – 10 B777-200s and two B737-800s. It has a modern cargo terminal, which can handle one million tons of freight per annum.

However, the 12 aircraft were not enough to handle the huge new market, so Ethiopian converted 25 of its passenger aircraft, including the B787s and A350s, into freighters.

According to GebreMariam, Ethiopia's cargo market has increased by 50%, boosting its revenue substantially, and compensating for the passenger flight losses. He said the revenue generated from cargo enabled the airline to cover its monthly expenses – some \$112 million.

Ethiopian has a workforce of 17,000 but GebreMariam said proudly: "We didn't lay off our employees." To stay afloat, however, the airline is working aggressively on cost reduction. ■

BOLLORÉ LOGISTICS MADAGASCAR PREND DE L'AMPLEUR

Bolloré Logistics, un leader mondial dans le secteur de la chaîne logistique, a ouvert une nouvelle structure à Antananarivo au sein de l'Aéroport International d'Ivato. Par Vincent Chappard.

Dotée de 300 m² de bureaux et 108 m² d'entrepôts douaniers, elle permet notamment d'appréhender plus efficacement la croissance du marché de la vanille ainsi que des nouveaux flux créés grâce au moyen d'une offre de transport « porte-à-porte » à destination des États-Unis.

Pour Sébastien Barth, directeur général de Bolloré Logistics Madagascar, « l'ouverture de cette nouvelle structure a permis d'augmenter de 60 % nos parts de marché sur un secteur aussi complexe et exigeant qu'est celui de la vanille ».

Bolloré Logistics Madagascar propose ainsi des solutions logistiques sécurisées et sur mesure à tous les exportateurs de vanille de même que de nouveaux services à d'autres industries et en particulier le textile.



Dans le contexte de la crise sanitaire du Covid-19, elle a facilité les flux de transport depuis les destinations non desservies par Madagascar via le hub de Paris-CDG.

Bolloré Logistics exerce aujourd'hui ses activités dans 48 pays d'Afrique.

Elle a également prolongé son service de fret cargo hebdomadaire (Wara Air Services) entre l'Afrique de l'Ouest et l'Europe. ■

SUMMARY

BOLLORÉ'S NEW BASE TARGETS MADAGASCAR'S VANILLA MARKET

Bolloré Logistics, a global leader in the supply chain sector, has opened a new base at Ivato International Airport in Antananarivo, Madagascar's capital and largest city.

With 300sqm of offices and 108sqm of customs warehouses, the new facility will assist development of the vanilla market, as well as new marketing opportunities created through 'door-to-door' routes to the USA.



For Sébastien Barth, managing director of Bolloré Logistics Madagascar, the opening of this new facility "... has allowed us to increase our market share by 60% in a sector as complex and demanding as vanilla exports", a vital crop for Madagascar.

Bolloré offers secure and tailor-made logistics solutions to all vanilla exporters, as well as for other industries, especially textiles, via the Paris-CDG hub.

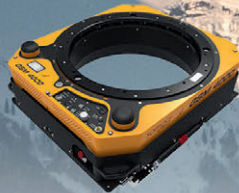
Bolloré Logistics currently operates in 48 African countries and it has also extended its weekly cargo service (Wara Air Services) between west Africa and Europe. ■

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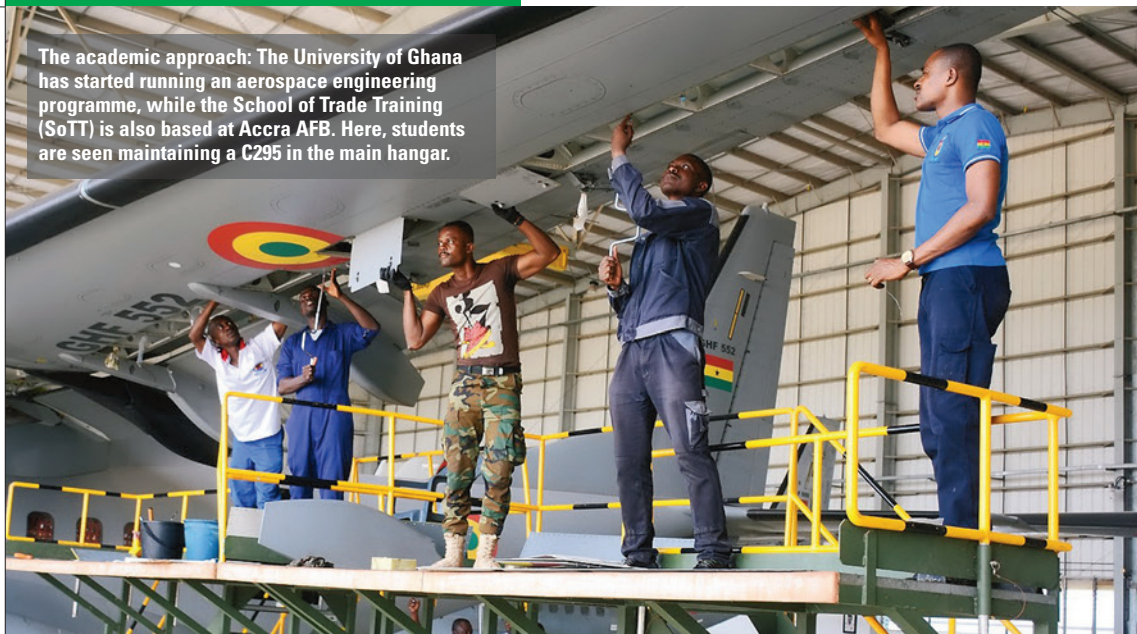
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The academic approach: The University of Ghana has started running an aerospace engineering programme, while the School of Trade Training (SoTT) is also based at Accra AFB. Here, students are seen maintaining a C295 in the main hangar.



MROs WINGING IT IN HUNT FOR WINNING FORMULA

*Covid-19 has shone a light – as if it were needed – on problems in Africa’s MRO sector. There are many strategies but no easy answers, as **Chuck Grieve** reports.*

The quandary of state ownership versus private ownership, versus a hybrid model, appears to have Africa’s MRO industry tied in knots as independent operators and national authorities struggle to find a magic formula.

In Nigeria, independent MRO, Aero Contractors, has floated the idea of expanding its operations to unused hangar space at the state-of-the-art MRO complex at Uyo Airport, built three years ago by the Akwa Ibom State Government.

Aero chief executive, Captain Ado Sanusi, told *This Day* the “economic crunch” from Covid-19 has brought increased demand on his company’s Lagos facility from airlines in Nigeria and elsewhere in west and central Africa. It made sense to use the Akwa Ibom Government’s facility: “If they are willing, we can work together because we need more space,” he said.

The move drew cautious support from Nigeria’s Dana Air, an Aero customer. Dana’s chief operating officer, Obi Mbanuzuo, was in favour of Aero’s expansion to Uyo but said he would “never be in support of the government to run an MRO”.

What the private sector needs, he added, is support by government to grow the economy and not government taking over and managing businesses.

But in Kenya, authorities are stepping in to try and save the country’s aviation industry through reorganisation. Kenya’s parliament is considering legislation to combine various players, including the national carrier, Kenya Airways (KQ), under the umbrella of a new state-owned Kenya Aviation Corporation (KAC).



Captain Ado Sanusi: Open to working with the Akwa Ibom State Government to gain more MRO hangar space.

is not a stand-alone entity,” pointed out Stephen Nyamota in Kenya’s *Business Daily*.

“While the Bill envisions setting up special economic zones, which are a major source of employment, this can only be delivered if the MRO entity within the investment corporation serves the region.”

The authorities in Kenya will be, no doubt, looking across at Addis Ababa and the progress of Ethiopian MRO, which is building its capabilities by a number of means and aims to keep its four hangars at Bole International Airport busy with airframe maintenance for its parent airline and third parties.

It has Boeing and Bombardier approvals for heavy maintenance on common types, and last spring received Airbus approval to carry out maintenance on the A350 XWB fleet in Africa.



Ethiopian teamed up early this year with Sanad Aerotech of Abu Dhabi to set up a centre of excellence for auxiliary power units (APUs) at its home base. The venture intends to start with APUs commonly used on Africa’s workhorses, the Boeing B737 and Airbus A320.

Another international company bringing its expertise to Africa is Lufthansa Technik (LHT), whose subsidiary, Lufthansa Technik Maintenance International (LTMI), was caught up in the widely publicised problems in South Africa by virtue of its relationship with Comair.

Tim Butzmann, the company’s new head of sales for Africa and the Middle East, acknowledged being “involved in that to quite a substantial degree”, but added: “Our expectation is that this business will re-emerge eventually.”

The German company’s South African operations are a “very important cornerstone of our strategy in Africa”, he said. “We are holding fast to what we have built up in South Africa, and we very much expect that once this storm is gone, there will be opportunities that we definitely want to be involved in.”

Overall MRO spend is also “substantial” in the Mediterranean rim of north Africa. “It’s certainly an area that we don’t want to lose out of sight.” Where there is growth, he added, “it’s definitely our ambition to be involved”.

Engine-maker Rolls-Royce has enjoyed business relationships with African carriers stretching back more than six decades.

Kaleyesus Bekele
talked to the company about what the future holds.



Big business: John Kelly (left) and Philip Atkins see huge potential in Africa.

R-R's wide role in Africa's future

The airline industry across Africa has had its ups and downs over the past six decades – and this latest pandemic crisis has been the biggest.

But, although there remain doubts about how quickly recovery will come, engine manufacturer Rolls-Royce has been present throughout and intends to be there through this latest challenge.

Egypt Air was operating Rolls-Royce-powered aircraft as far back as the 1940s and 50s.

“It’s true that we have a long history in Africa and, today, we power about 50% of the continent’s wide-body fleet. We also power 100% of the wide-body aircraft on order,” said John Kelly, senior vice president customers – Middle East and Africa, speaking at this year’s Aviation Africa event just as the coronavirus crisis began.

At that point, the UK company boasted 20 wide-body customers in Africa, spreading across 14 countries. “We see a huge amount of growth potential,” Kelly added.



Africa’s largest carrier, Ethiopian Airlines, has 24 Rolls-Royce powered wide-body aircraft, including Boeing 787s and Airbus A350s in its fleet. Before lockdown, another 10 A350s, powered by the Rolls-Royce Trent XWB engine, were on order and Rolls-Royce still sees opportunity ahead.

“We see huge growth potential in Ethiopian Airlines and we expect to power more African wide-body deliveries in future,” said Kelly.

Some African countries are re-establishing their national carriers, while smaller airlines are also being created by the private sector.

Air Senegal is one of the new smaller carriers operating Rolls-Royce-powered aircraft. Last year it took delivery of two A330neo aircraft.

Troubled Air Mauritius had taken delivery of two A330neos and, newcomer Uganda Airlines, was preparing to receive one as it prepared to launch long-haul routes.

It had not been an all-smooth ride before the pandemic. Ethiopian Airlines did have some challenges with the

Trent engines that power the B787s. The national airline worked with Rolls-Royce to manage the technical glitches.

“We have been working very closely with all customers, including Ethiopian Airlines, to manage the challenges around the Trent 1000 engine to minimise service disruptions. We have been modifying our engines, putting in improved components to improve reliability,” said Kelly. As a result, the company is now reporting zero airport-on-ground (AOG) incidents.

The Trent engine family – first introduced in 1995 with the Trent-700 – is celebrating its 25th anniversary. It has accumulated 145 million flight hours.



Philip Atkins, Rolls-Royce vice president customers, said: “What has been learnt among family members has been developed into the next generation of engines. We have been increasing technological development capabilities and efficiencies. And those improvements, alongside the cost of ownership, have given the product its success.”

According to Atkins, the ‘Total Care’ service that Rolls-Royce provides has transformed the way customers own and operate the Trent engines. “The level of support we provide gives operators a huge advantage,” he added.

The digital capabilities of the Trent engines provide a huge amount of data. “By harnessing and processing the information, we are able to improve reliability, durability and efficiency,” Atkins explained.

With many African airlines under-financed, Rolls-Royce is advising them to discuss engine financing options. “One of the key ways we can help is that we have long relationships with export credit agencies, which provides a good robust way for airlines to access finance related to our products,” said Kelly.

He suggested that small operators review available products, such as the A330 classic aircraft, that provide a more affordable way to operate. “Accessing that market gives small operators a very low-risk and low-finance entry point,” he said.

“We see a well-established market for Rolls-Royce in Africa. There is a huge potential for the future.”

“We see huge growth potential in Ethiopian Airlines and we expect to power more African wide-body deliveries in future.”

JOHN KELLY

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Mohamed Moussa, le directeur général de l'ASECNA, a présenté à Vincent Chappard, l'ADN et les futurs développements technologiques de l'agence qui fournit des services de navigation aérienne pour une gestion intégrée d'un espace aérien de 16,1 millions de kilomètres carrés en Afrique.

UNE ROUTE HI-TECH POUR LA SÛRETÉ DU CIEL AFRICAIN

L'ASECNA est aujourd'hui pleinement engagée à fournir des services SBAS (Satellite Based Augmentation System) au continent africain et à l'océan Indien pour renforcer les opérations de navigation et optimiser les trajectoires, réduire les risques d'accident pendant les atterrissages, et améliorer l'accessibilité des aéroports. L'agence vient d'ailleurs de fournir début septembre, en collaboration avec NIGCOMSAT et Thales Alenia Space, le premier service ouvert SBAS africain, ouvrant ainsi une nouvelle ère dans le domaine de l'augmentation des performances de navigation par satellite en Afrique et dans l'océan Indien.

La plus vieille institution d'intégration africaine continue à innover. Voici les principales missions qu'elle s'est fixées pour son 60ème anniversaire :

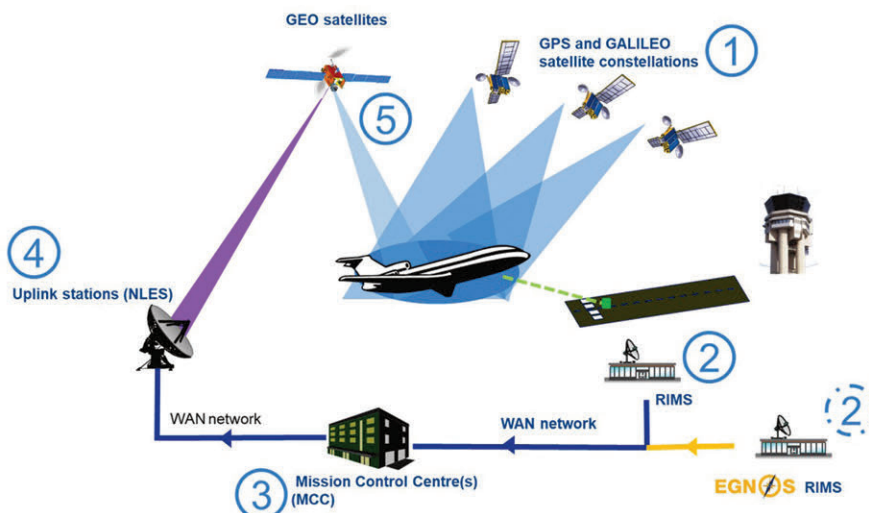
- la dotation d'un satellite pour assurer sa mission
- le renforcement technologique
- la rationalisation des services présents dans les États membres pour mettre en œuvre le ciel unique pour l'Afrique (CUPA)
- l'encouragement à l'adhésion de nouveaux États membres ou encore la coopération interafricaine et internationale en matière de sécurité de la navigation aérienne.

Sur un plan plus stratégique, et compte tenu d'un environnement concurrentiel croissant, l'objectif de l'ASECNA demeure la consolidation de son positionnement comme fournisseur de services à haute valeur ajoutée.



« Notre principal axe de développement sera de poursuivre le renforcement de nos services pour améliorer la sécurité des vols ainsi que leur efficacité en termes de consommation de carburant et de réduction des émissions de CO₂ », rappelle Mohamed Moussa, directeur général de l'ASECNA.

Les principaux catalyseurs sont les technologies innovantes et habilitantes à savoir l'ADS-B (Automatic Dependent Surveillance-Broadcast) par satellite et le SBAS. Celles-ci sont associées aux méthodes de gestion du trafic : le



ASECNA SBAS program.

« vectoring » (guidage). Elles sont aujourd'hui appliquées sur l'ensemble de l'espace ASECNA.

D'ici 2023, Mohamed Moussa souhaite également mettre en œuvre les « Free Route Airspace » (FRA) qui permettront de s'affranchir petit à petit des routes fixes ATS et d'offrir les meilleures trajectoires aux usagers de l'espace ASECNA. Ce concept vise à renforcer la sûreté des opérations de navigation et de surveillance durant toutes les phases de vol.



Ce programme est considéré par l'OACI, au sein de l'annexe 10 de la Convention de Chicago, comme la solution SBAS pour l'Afrique. Il prévoit la fourniture d'un service destiné à des essais techniques et à des démonstrations de terrain pour les avions et les hélicoptères. Ce service dit « pré-opérationnel » est déjà effectif et les premiers services opérationnels sont attendus à partir de 2024.

L'infrastructure technique pour leur fourniture a été définie et a fait l'objet d'une conception préliminaire dont Thales Alenia Space (TAS) est un partenaire majeur (voir encadré). La couverture géographique progressive des services et de leurs performances a aussi été validée. Le prochain

jalou sera le déploiement effectif et la mise en opération de cette infrastructure, que l'agence essaye d'accélérer autant que possible.

Pour Mohamed Moussa, les futurs services SBAS de l'ASECNA sont très attendus. Leur apport bénéfique est pleinement reconnu par les compagnies aériennes qui, à l'instar d'ASKY ou d'Air France, soutiennent l'agence dans leur déploiement.

Une étude récemment conduite par l'ASECNA a d'ailleurs montré que l'utilisation de ces services par les compagnies aériennes dans l'espace aérien sub-saharien sur la période 2025-2045 génèrera un profit net global actualisé de plus de 600 millions d'euros et permettra une réduction de plus de 8 millions de tonnes de CO₂.

Ces développements technologiques constituent des moyens clés pour atteindre l'unification de l'espace aérien en Afrique. L'ASECNA propose en effet de mettre en œuvre le CUPA sous l'égide de l'Union africaine (UA) pour que l'ensemble du continent puisse en bénéficier. Ce chantier progresse. Son exécution a été confiée à l'OACI, avant d'aborder les aspects institutionnels avec l'UA.

Autant de projets que Mohamed Moussa pourra piloter durant son nouveau mandat de quatre ans à la tête de l'ASECNA. ■



Mohamed Moussa:
 « Notre principal axe de développement sera de poursuivre le renforcement de nos services pour améliorer la sécurité des vols ainsi que leur efficacité en termes de consommation de carburant et de réduction des émissions de CO2 ».

LE SBAS AU SERVICE DE L'AFRIQUE

Thales Alenia Space et l'ASECNA coopèrent depuis une dizaine d'années. En 2019, elles ont signé un contrat pour la réalisation de l'étude préliminaire de définition de l'architecture (phase B) du programme SBAS. Il s'étalera sur une durée de 18 mois, période durant laquelle les compagnies aériennes associées pourront notamment tester le service pré-opérationnel.

Thales Alenia Space est un des leaders mondiaux dans le domaine des satellites et un acteur majeur dans le domaine de l'infrastructure orbital. Au cœur des programmes Galileo et EGNOS, elle fournit des solutions innovantes pour les télécommunications, la navigation, l'observation de la Terre et la gestion de l'environnement, l'exploration, les sciences et les infrastructures orbitales.

Pour Benoit Broudy, directeur des activités navigation et Michel Monnerat, directeur des avant-projets de Navigation de l'entreprise franco-italienne, cette collaboration avec l'ASECNA « permet de faire évoluer nos technologies en particulier sur des problématiques liées aux perturbations ionosphériques autour de l'équateur qui sont plus

complexes ». Ils ajoutent que le programme SBAS donnera au continent africain une avance considérable par rapport aux autres acteurs dans le monde.



Le développement de SBAS offrira également, selon Benoit Broudy, d'énormes bénéfices aux États membres de l'ASECNA dans le développement de l'agriculture mécanisée, le domaine maritime, l'observation de la Terre ou encore de la voiture autonome.

Michel Monnerat explique quant à lui que la partie « aéronautique » certifiée du programme SBAS n'est que la partie émergée de l'iceberg. Il pourra apporter une véritable valeur ajoutée et un retour sur investissement gigantesque pour l'Afrique.

On assiste aujourd'hui à une évolution technologique vers des systèmes de navigation et de surveillance aérienne satellitaires (comme l'ADS-B) qui s'appuient sur le SBAS et débouchent sur de multiples applications dans des secteurs très variés. ■

SUMMARY

HI-TECH WAY TO KEEP AFRICA'S SKIES SAFE

The Agency for Aerial Navigation Safety in Africa and Madagascar (ASECNA) is an air traffic control organisation based in Dakar, Senegal. It came into being more than 60 years ago and manages 16.1 million square kilometres of airspace. Vincent Chappard met the organisation's director general, Mohamed Moussa.

ASECNA is fully committed to making the skies over Africa as safe as possible – and using the latest technology to do it.

It is currently working with Thales Alenia Space (TAS) to provide satellite-based augmentation system (SBAS) services to the African continent and the Indian Ocean to strengthen navigation operations and optimise trajectories, reduce the risk of accidents during landings, and improve accessibility of airports.

From 2022, these services will make it possible to increase the positioning performance provided by the navigation constellations of satellites such as GPS or Galileo.

TAS and ASECNA have been cooperating for 10 years. In 2019, they signed a contract to carry out the preliminary architectural definition study (phase B) of the SBAS programme. It will be spread over a period of 18 months, during which time associated airlines will be able to test the pre-operational service.

“Our main focus will be to continue strengthening our services to improve flight safety and efficiency in terms of fuel consumption and reduction of CO2 emissions,” said Moussa.



The main enablers are automatic dependent surveillance-broadcast (ADS-B) – a surveillance technology in which an aircraft determines its position via satellite navigation and periodically broadcasts it, enabling it to be tracked – and SBAS. These are now being applied throughout the ASECNA area.

By 2023, Moussa also wants to implement free route airspace (FRA), which will gradually free itself from fixed air traffic service (ATS) routes – the usually designated route for channelling the flow of traffic. This, he believes, will offer the best trajectories to users of the ASECNA space and will enhance the safety of navigation and surveillance operations during all phases of flight.

The International Civil Aviation Organization (ICAO) is already allowing ‘pre-operational’ technical tests and field demonstrations of the system for aircraft and helicopters. The first operational services are expected from 2024.

A study recently conducted by ASECNA has shown that the use of these services by airlines in the sub-Saharan airspace over the period 2025-2045 will generate an updated global net profit of more than 600 million dollars and will allow a reduction of more than 8 million tonnes of CO2.

Moussa will drive these projects during his second four-year mandate at the head of ASECNA. ■

Sameer Rehman

Marcelle Nethersole *speaks to Bell's managing director for Africa and Middle East.*

1

■ What presence does Bell have in Africa?

Bell has established significant relationships across Africa with close to 600 helicopters across all 54 countries.

Our presence is far-reaching in many sectors of the market including military, law enforcement, medical services, oil and gas, corporate tourism, VIP flights, and wildlife preservation.

Bell has several partners on the continent who help us service and support our customers.

In markets like Nigeria and Angola, which rely heavily on oil and gas revenues, our decades-long experience with the Bell 412 and Bell 407 have brought stability, security, and prosperity.

In Uganda and Kenya, Bell has been successfully meeting the needs of the military with the Bell Huey II.

And, the VIP and airborne law enforcement markets throughout the continent have found promise in a wide range of our product offerings, including the Bell 505 and Bell 429.

2

■ What are the latest training opportunities with Bell in Africa?

Since its inception 85 years ago, Bell has taken pride in providing safe, reliable, and effective vertical lift transportation and to being a key contributor to the flight-training market. Countless numbers of pilots around the world have learned to fly on Bell products.

With the new Bell 505, we have once again redefined the short, light-single market, effectively replacing and enhancing the Bell 206 series that is popular in many parts of Africa.

The Bell 206 B and Bell 206 L have had a profound impact on the training market in Africa, with growing opportunities in South Africa, Senegal, Morocco, Egypt and other economies where helicopter aviation is important.

The Bell 505's advanced technology, cost-effectiveness and ease of operation also make it a favourite for many of these countries.



3

■ What challenges do you face in the region?

Africa is incredibly diverse. With more than 140 languages, the continent presents both unique opportunities and challenges.

Bell has continued to focus on the ability to approach customers at a local level. This has helped us overcome some of the challenges that many companies face in Africa.

We have learned that what may work in southern Africa, for instance, is untenable in north Africa, where the environment differs.

Another challenge, not necessarily unique to Africa, is the access to funds. We have seen budgets continuously fluctuate and plans to procure helicopters for governments are challenged because there are other priorities, such as education, infrastructure, medicine and more.

4

■ Is there anything new in the pipeline for Africa?

Bell is always looking at ways to redefine vertical lift. Africa faces unique challenges that can only be addressed by safe, reliable, and effective transportation.

Bell has adapted over the last few years to become a technology company to address communication-through-transportation challenges.

Bell is heavily involved in delivering logistical solutions in the form of autonomous flight. Our autonomous pod transport (APT) programme will do just that. It will not only help the military in delivering critical supplies to troops in remote areas, but also the common citizen can gain access to medicine, information, and, in the future, something as simple as daily supplies as groceries.

Bell is looking at possibilities to make this service available to the everyday person for their everyday needs.

5

■ What does a typical day hold for you?

I have had the pleasure of working at the Textron Group companies for 22 years and my typical day is anything but typical.

My day is spent by finding ways to enhance my understanding of the customers and the world around me.

I have discovered, over the course of my career, that our customers do not care where we do business, as long as we do business where they live.

Managing a continent as diverse, complex, and interesting as Africa means that the learning never stops. I have been enthralled by the continent's diversity, and on my travels there find the people to be energetic, engaging but, most importantly to me, inspiring.

I try to visit once a month and always attempt to learn something new about how we can better fit into the African life.

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