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RWANDAIR BOSS LINKS IN TO AFRICA'S NEW NETWORKS

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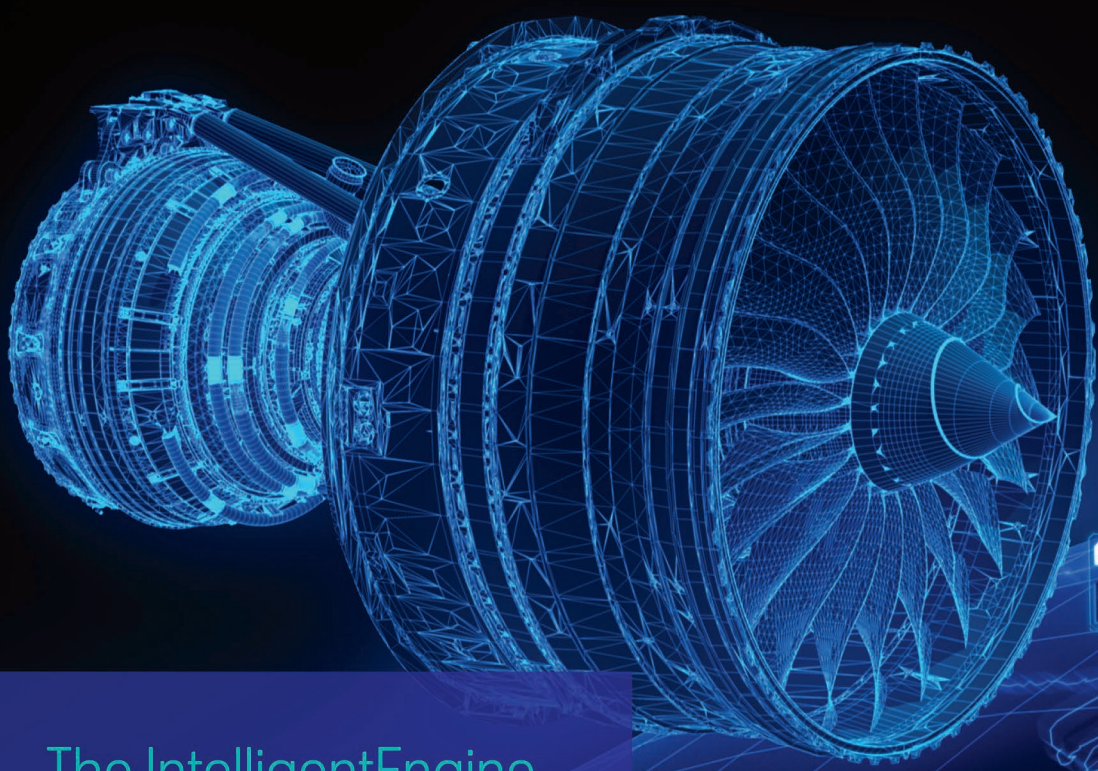
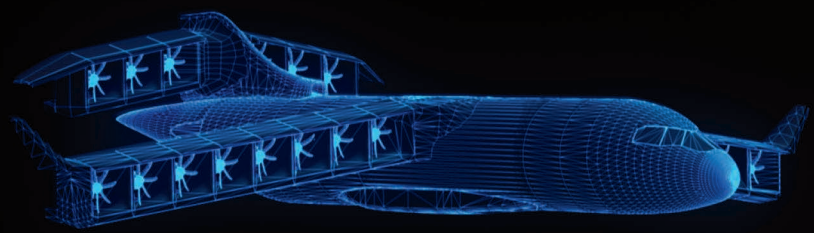
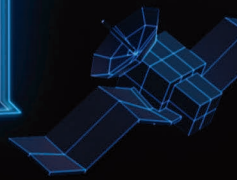
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TIMES Aerospace Limited
3-4 Rumsey House, Locks Hill, Rochford
Essex, SS4 1BB, UK
Tel: +44 (0)1702 53 0000
Fax: +44 (0)1702 53 3088

Website: www.africanaerospace.aero

Directors:
Mark Brown & Kevin Sammon

Publisher:
Mark Brown
mark.brown@aficanaerospace.aero

Display Advertising:

David Evans Winship
david.evans@aficanaerospace.aero
Grant Lee
grant.lee@aficanaerospace.aero

Production Coordinator:
Ethan Cobbing
ethan.cobbing@aficanaerospace.aero

Circulation Dept:
Clare Brown
clare.brown@aficanaerospace.aero

EDITORIAL
news@aficanaerospace.aero

Editor-in-Chief: Alan Peaford
Editor: Steve Knight
Deputy Editor: Marcella Nethersole
Francophone Editor: Vincent Chappard
Air Transport Editor: Victoria Moores
Air Transport: Martin Rivers, Alan Dron
Defence: Jon Lake, Alan Warnes,
Business Aviation: Dave Calderwood
Space & Technology: Steve Nichols
Airports & ATM: Alan Dron
Contributors: Chuck Grieve, David Oliver,
Erwan de Cherisey, Beth Stevenson.
News Briefs: In partnership with ch-aviation

REGIONAL CORRESPONDENTS
South Africa: Mark Mansfield, Sam Basch
Namibia, Zimbabwe: Oscar Nkala
Zambia: Humphrey Nkonde
Nigeria: Chukwu Emeke
Ethiopia: Kaleyesus Bekele
Kenya: Githae Mwaniki
Uganda, Rwanda: Hillary Muheebwa
North Africa: Mohamad Al Ahli, Vincent Chappard
Cameroon: Romuald Nguéyap

Picture Editor: Ian Billinghurst
Photographers: Mark Wagner, Jamie Hunter,
Tom Gordon

Design: Chris Murray, Allsortz Ltd
Sub Editors: Steve Knight, Kathie Jones
Editorial administration: Petya Ivanova

Editorial head office:
Aerocomm Ltd, Norths, Rectory Road, Orsett
Essex RM16 3JU, UNITED KINGDOM
+44 (0) 208 133 3420

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African governments must look at the bigger picture

The African Airlines Association (AFRAA) was celebrating its 50th anniversary in Rabat in November. With tremendous Moroccan hospitality against the scenic backdrop of the capital, it was unsurprising there was a good spirit of collaboration and community.

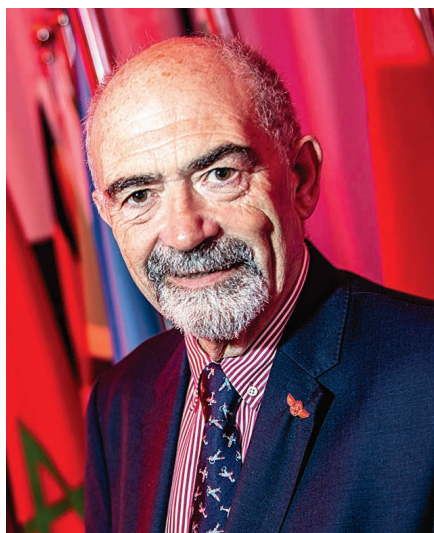
The airline industry in Africa has come on tremendously in recent years. Huge efforts are being made to shake off the old perceptions that flying in Africa is unsafe, uncomfortable and uncompetitive.

The continent witnessed its second consecutive year of zero fatalities and zero hull losses. Hosts of the AFRAA assembly, Royal Air Maroc, took delivery of its first Boeing 787-9 Dreamliner just after the event.

Airlines like Ethiopian, EgyptAir, RwandAir, Tanzania, and Air Senegal, are all expecting delivery of the latest airframes and are turning their attention to passenger experience through cabin improvements and investment in connectivity.

But Morocco aside, a lack of competitiveness remains. Despite the best efforts, travelling through Africa remains a challenge. Many attendees at the assembly still had to route through Lisbon, Dubai, Paris, London or Brussels to get to the Moroccan capital. Barriers are still in place which prevent a free movement to neighbouring countries.

The political will of African nations to create its single skies to enable such competition is welcomed on the one hand, but feared on the other. Will it threaten the existence of a national carrier?



The evidence elsewhere is that it may. But is that a bad thing?

Every airline cannot be everywhere. There would be some consolidation (look at Lufthansa, Austrian, Swiss, Brussels Air, in Europe). But currently not enough Africans fly across the continent to make it viable for everyone.

As pointed out at the assembly, the total number of passengers carried across the whole of Africa in a year is less than one single low-cost carrier in Europe, which has a much smaller total population.

The barriers are in place from the very people that are calling for liberalisation – governments.

African governments need to support air transport as a means of generating greater revenue for their countries rather than take from them. Passengers – business and tourists – are essential for growing economies. Africa has some of the highest ticket prices in the world as a result of some of the highest costs.

African airlines are still losing money as the rest of the world is seeing growth. Airlines in Africa see higher airport charges and fees, higher fuel costs and higher taxation. There are many visa and travel restrictions and airports that remain below standard or unfit for purpose, designed to satisfy patriotic egos rather than passenger needs.

Let's hope that governments take heed and review their domestic practices, look at the bigger picture, and let Africa fly.

Alan Peaford,
Editor-in-Chief

COVER: RwandAir CEO Yvonne Manzi Makolo. PICTURE: RWANDAIR

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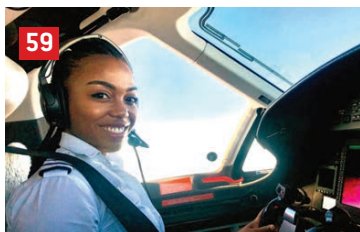


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A Boeing 787 Dreamliner aircraft is shown in flight, banking to the right. The aircraft is white with blue accents on the tail and engines. The background features a scenic landscape with rolling hills, a bay, and mountains under a clear blue sky. A large, stylized blue circular graphic is overlaid on the left side of the image.

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Airbus Southern Africa wins award

Airbus Southern Africa won the prestigious 2018 South African Civil Aviation Award for the best aircraft maintenance organisation in recognition of its transformation programme's contribution to helicopter safety, while at the same time, improving efficiency.

Airbus Southern Africa, based at Grand Central Airport near Johannesburg, supports more than 350 light and medium Airbus helicopters in southern and eastern Africa. It launched its transformation programme three years ago.

"Our helicopter maintenance, repair and overhaul transformation programme represents a major investment in training and skills development for technical personnel, a completely revised facilities layout and new IT-based systems and management tools," said Arnaud Montalvo, managing director of Airbus Southern Africa.

YallaFly enters market

YallaFly airlines, a new private air charter airline in its formative stages, has said it has been organised to take full advantage of a specific gap in the mid-haul international travel market, including Africa.

A representative said: "We offer highly comfortable, safe and cost-effective way of travelling, which can be a good alternative to the traditional means of transport. Security is our priority; we have made it a priority by having a modern fleet and also by meeting all new safety standards."

African 'first' for Rolls-Royce

Rolls-Royce and South African Airways Technical (SAAT) have opened Rolls-Royce's first lease engine storage facility in Africa.

The facility, based in the SAAT site at Johannesburg's Oliver Tambo International Airport, is capable of storing a full range of Rolls-Royce engine types to meet the requirements of airline and business jet customers based or operating in Africa.

It can house every type of Trent engine, including the Trent 7000, which will soon power the Airbus A330neo into service.

AL250 for SA pilot training

Alsim has sold an AL250 to Aviation Pilot Training, a Cape Town-based flight school.

The AL250 is European Aviation Safety Agency flight navigation procedures trainer (EASA-FNPT II)-certified. It addresses initial phase training needs and, in addition, offers both classic and glass cockpit instrumentation for each flight model at the flick of a switch.

The device will be delivered in the first quarter of 2019.

ACSA moves on cancer

Airports Company South Africa (ACSA) has launched a partnership with the Cancer Association of South Africa (CANSAs) that will support the association with philanthropic donations and volunteering support from its employees at all nine airports.

The donations will assist in educating members of the public about the disease, training auxiliary nurses, developing infrastructure and conducting more cancer research.

SAA new interim CFO

South African Airways (SAA) has appointed Deon Fredericks from Telkom as its new interim chief financial officer (CFO).

The appointment

became effective from October 15. He is on secondment from Telkom for 12 months.

"We welcome the appointment of Deon to ensure that SAA's strategic objective of transforming the business into a financially sustainable aviation group is achieved," said SAA board chairperson, JB Magwaza.

Fredericks takes over from Robert Head, whose contract as SAA interim CFO ended in September.

PassionAir's Hitit solution

PassionAir has chosen the Crane solutions suite from Turkish IT provider, Hitit.

The airline is Hitit's eighth collaboration in Africa.

PassionAir is operating scheduled flights domestically from its Accra hub to Kumasi, Takoradi and Tamale, with three Bombardier Q 400 aircrafts.

New start-up solution

Seabury Solutions, a provider of information technology for the aviation industry, announced the addition of Zimbabwe's new start-up airline, Zimbabwe Airways, in October.

The airline's new aircraft will begin their certification process under control of the Alkym management and control system for aircraft maintenance – the first of the four new Boeing 777s landing in Herrera already had its data loaded on to the system.

Zimbabwe Airways have decided to use the full Alkym suite and will phase it into the operation as it grows and matures.

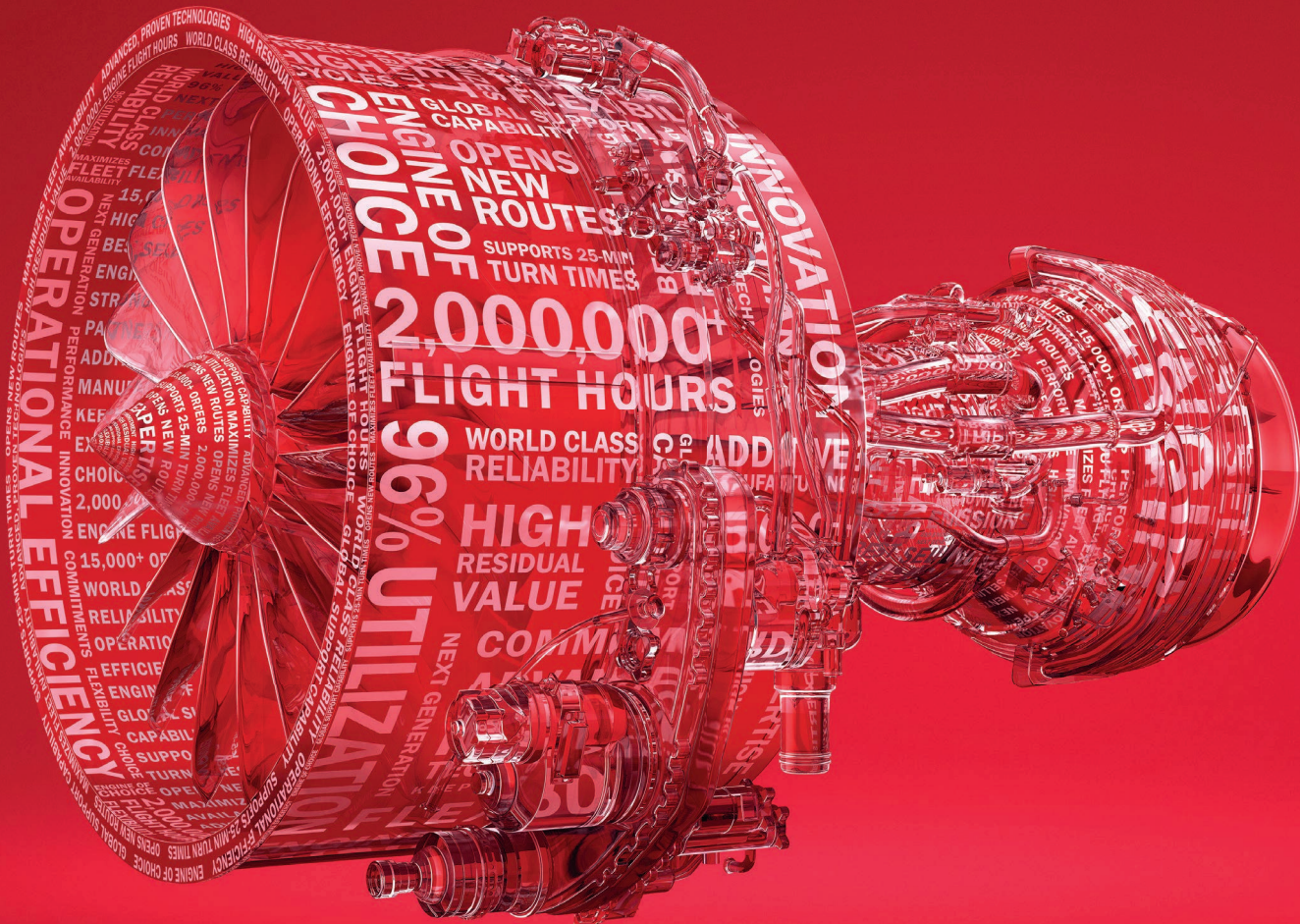


Ethiopian CEO, Tewolde GebreMariam (centre) receives the award.

Ethiopian wins best Airlines

Ethiopian Airlines won the 2018 Best Airlines in Africa Award for the seventh year in a row from the African Airlines Association (AFRAA). The award was given in recognition of its exceptional financial performance.

The ceremony took place at the 50th AFRAA Annual General Assembly in Rabat, Morocco.



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Ethiopian receives eighth freighter

Ethiopian Cargo & Logistics Services took delivery of its eighth B777 freighter aircraft at its home base at Bole International Airport.

Ethiopian Group CEO, Tewolde GebreMariam, said: "The new aircraft will help us bolster our leading role in cargo operation in Africa and beyond, further expanding our commendable contribution in boosting the continent's airfreight export/import traffic as laid out in our Vision 2025."

Botswana replaces C212

The Botswana Defence Force Air Wing has acquired a second-hand Airbus CAS C212 light turboprop transport aircraft to replace one similar that crashed in 2017.

Botswana originally received a pair of short take-off and landing C212-300s in June 1993. However, one of these was lost in February 2018, when it crashed near Thebephatshwa Air Base with the loss of all three crew.

The new aircraft, an upgraded C212-400, was built in 1998 and had fewer than 500 hours on its airframe.



Ray Mills, CEO and accountable manager, GainJet Ireland and Patrick Edmond, managing director of Shannon Group's International Aviation Services Centre (IASC).

GainJet receives world's first EJ-registered aircraft

Celebrating 90 years of the Irish aircraft registry with the Irish Aviation Authority, GainJet Ireland has acquired an Embraer Lineage 1000 EJ-IOBN – the first aircraft to be registered under the prestigious new EJ Irish aircraft register.

"It is with great pride that we share with the Irish Aviation Authority in their celebrating 90 years of the Irish aircraft register. With their support, we are now able to offer to aircraft

owners worldwide an all in-house quick and professional EU register.

"With our partners, Jet Lease Finance, established in Ireland, we are now able to provide a one-stop full turnkey operational and finance solution for corporate jets introduction into Europe NCC or Commercial environment," said GainJet Aviation Group CEO, Captain Ramsey Shaban.

Components MoU signed

Meggitt, a specialist in high-performance components for the aerospace market, and OEMServices, which deals in component, logistic and trading services for airlines and original equipment manufacturers (OEMs), have signed a memorandum of understanding to provide

component after-market services for airlines operating in Africa, as well as the Middle East, Asia and Russia/CIS.

Africa backs A330neo

Four African airlines are high on the delivery list for Airbus' latest aircraft – the A330neo.

Air Mauritius will be one

of the first airlines in the world to receive the A330neo. Further deliveries this year will go to RwandAir, which has two on order; Air Senegal, which has also ordered two, and Uganda (another two).

"This occasion marks another step forward to meeting our industry's goal for sustainable aviation," said Guillaume Faury, president Airbus Commercial Aircraft.

Comair to partner with Maureva

South African carrier, Comair, has selected Maureva's EDGAR passenger revenue accounting solution to support its revenue protection and financial reporting.

"We selected Maureva after a thorough evaluation of several providers. We believe EDGAR will enable us to transform our passenger revenue accounting processes by providing a solution to fully address our business requirements. We are looking forward to a very positive business partnership," said Dhavan Chetty, revenue accounting manager at Comair.

Jeju opts for EDGAR

Maureva, an airline software and service solutions provider based in Mauritius, has announced that Jeju Air has selected the EDGAR passenger revenue accounting solution.

Woo Seok Yang, Jeju Air's deputy general manager - information strategy, said: "We have no doubt that EDGAR, combined with Maureva's dedicated team, will provide us the desired scalability to support our future strategies."

Dream delivery

Royal Air Maroc (RAM) has received its first GENx-1B-powered Boeing 787-9 Dreamliner aircraft.

"This delivery marks our continuing efforts to grow our fleet and expand our long-haul routes to North and South America, the Middle East and Europe," said RAM chief executive officer, Abdelhamid Addou.

RAM will eventually operate a fleet of nine GENx-powered B787 Dreamliners.

Air Botswana receives its first ATR 72-600

Air Botswana has taken delivery of its first ATR 72-600.

The aircraft, delivered in Toulouse, is the first of a contract signed in July for two ATR 72-600s.

As African Aerospace went to press, the company was expecting delivery of its second one.

The ATR 72-600s will upgrade Air Botswana's current fleet of three ATR 42-500s and one ATR 72-500s.

Air Botswana CEO, Agnes Tsholofelo Khunwana, said: "We have been using ATRs for more than 20 years and are very satisfied with their operating results. The latest generation of ATRs will allow us to provide the highest standards of comfort, reliability and eco-efficiency to our customers."



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Innovation. We make it fly.

Travellers to double by 2037

The International Air Transport Association (IATA) has revealed that present trends in air transport suggest passenger numbers could double to 8.2 billion in 2037. A doubling of air passengers in the next 20 years could support 100 million jobs globally.

Alexandre de Juniac, IATA's director general and CEO, said: "There are two important things that stand out about this year's forecast. Firstly, we are seeing a geographical reshuffling of world air traffic to the east. And, secondly, we foresee a significant negative impact on the growth and benefits of aviation if tough and restrictive protectionist measures are implemented."

Opening the Pearly gates

The Moroccan Airports Authority (ONDA) has partnered with National Aviation Services (NAS) to launch the first electronic gates (E-gates) at the Pearl Lounge in the Marrakech Menara Airport departures area. This is the first of its kind across Africa.

With this new self-service check-in, guests can access the lounge faster without checking in at the reception desk or waiting in a queue. Passengers simply scan their printed or online boarding pass at the gate and enter the lounge.

Egypt boost for Russian Helicopters

Russian Helicopters Holding Company is completing the creation of a maintenance, repair and overhaul (MRO) centre for Mi-8/17 helicopters based at the facilities of Helwan Factory for Developed Industries (HFDI) in Helwan, Egypt.

The holding company plans to certify the MRO



Russians deliver to Equatorial Guinea

As part of its contract with the Equatorial Guinea government, the Russian Helicopters holding company has transferred two Mi-172 helicopters, manufactured at Kazan Helicopters (KVZ).

The vehicles have already been sent to central Africa.

"Equatorial Guinea is a long-time partner of Russian Helicopters. In 2006, we also

delivered two Mi-172 helicopters in salon VIP and passenger modifications to the country," said Russian Helicopters holding company CEO Andrey Boginsky.

"Russian helicopters are popular in Africa due to their reliability, easy operation, and good price/quality ratio. Therefore, I am sure that this contract will not be the last."

centre in Egypt in 2019.

During the first stage, the centre will be carrying out maintenance and overhaul of Mi-8T and Mi-17-1V helicopters operated by the Egyptian Air Force.

Easing the turbulence

The International Air Transport Association (IATA) has launched its turbulence aware data resource to help airlines avoid turbulence when planning routes in flight.

Turbulence aware collects

data from multiple contributing airlines, followed by a rigorous quality control. Then the data is consolidated into a single, anonymised, objective source database which is accessible to participants.

Turbulence aware data is turned into actionable information when fed into an airline's dispatch or airborne alerting systems. The result is the first global, real-time, detailed and objective information for pilots and operations professionals to manage turbulence.

Leading idea for Ethiopia

Ethiopian Airlines and the European Union delegation to Ethiopia have signed a letter of intent to establish an Ethio-European International Business School (EEIBS).

Ethiopian will host the delivery of an MBA programme at the Ethiopian Aviation Academy with the support of the EU delegation under the EU's transformation triggering facility (TTF) programme.

Krimson in the pink...

Ethiopia-based aviation services company, Krimson, has been awarded one of the first new business aviation licences issued by the Ethiopian Civil Aviation Authority.

According to the company's founder and managing director, Dawit Lamma (pictured), the new permits have been created to establish a transparent regulatory framework to support fair processing of flight permits and ground-handling services by operators or agents.



"The aim is to bolster local aviation industry standards to support the country's growing aviation sector," Lamma said.

Only a limited number of licences have been made available to ensure that the holders consistently deliver the certified standards, which are comparable to accepted ICAO service levels.



ExecuJet keeps up the standard

ExecuJet has celebrated the successful renewal of its international standard for business aircraft operations (IS-BAO) stage III and Wyvern Wingman audits last November.

ExecuJet's South African air operator's certificate (AOC) was

originally awarded IS-BAO stage III accreditation in 2015 and is the first of the operator's AOCs to receive a renewal audit, undertaken every three years.

ExecuJet's other IS-BAO stage III-accredited AOCs are its Asia-Pacific,

Europe and Middle East operations.

The renewal audits were based on ExecuJet's acclaimed safety management system, security, training, flight operations, enterprise resource planning, occupational health, safety and environment policies, and quality.

*Yvonne Manzi Makolo was appointed CEO of RwandAir in April 2018. With no prior experience of the aviation industry, she has risen to the challenge and – less than a year in – she speaks to **Victoria Moores** with all the authority and passion of an industry veteran.*

MAKOLO CONNECTS HER MAGIC RWANDA

«Yvonne Manzi Makolo connecte le Rwanda » – Page 14

“This is the toughest job I’ve ever had,” Yvonne Manzi Makolo said, as we began our chat about how she came to be CEO of RwandAir.

“It’s been a crash course in learning about the aviation industry.” The smile in her voice shows that she relishes the challenge.

Makolo was placed with RwandAir by government appointment in April 2017 and was promoted to CEO a year later. “I’m a telephone [industry] person. Now I’m in the airline industry,” she said.

While Makolo may be an industry newcomer, there are parallels between her old life in telecommunications and her new life in aviation. Both industries depend on keen customer focus, while maintaining tight control of revenues and costs. But, more importantly, both RwandAir and telecommunications are vital national infrastructure with one central role: connecting people.



“RwandAir’s primary purpose and goal is to support the economy. We are a land-locked country, so the need for aviation is extremely high. It is critical for the development of the country. Road transport is very expensive and tedious. The importance of air transport is a no-brainer for the country,” said Makolo.

Rwanda is one of Africa’s fastest-growing economies, expanding at around 7% per year. Its main export used to be tea and coffee, but that has now shifted to tourism.

The country also ranks third in Africa, in terms of hosting international conferences, cementing RwandAir’s importance as a national asset. “I believe that success has a lot to do with connections to the country,” Makolo said, as well as the government’s visa-on-arrival policy, which simplifies travel to Rwanda.

“Rwanda understands the importance of connection, especially to African countries and

RwandAir is now leveraging the brand recognition that it has built up over recent years, offering competitive fares.



beyond. This is a major priority for the airline and for the government,” she said.

When Makolo joined RwandAir, the airline operated around 20 routes. Since then, London (UK) and Brussels (Belgium) have joined the network and a new hub has been opened in Cotonou (Benin). Today, the airline flies to 26 destinations and is still growing. “It’s been a very fast expansion process,” Makolo said.

RwandAir operates 12 aircraft, comprising two Airbus A330s, six Boeing 737NGs, two Bombardier CRJs and two Q400s. “We have a very diverse fleet. We are looking at rationalising, by phasing out the CRJs and focusing on the Q400s, in terms of our regional routes.”

In 2019, RwandAir will also take two A330neos and two 737 MAX 8s on lease, which will be used for growth rather than replacements. The A330neos will be deployed on new long-haul routes to Guangzhou, China and New York JFK, as well as boosting capacity to Dubai, Lagos

(Nigeria) and Johannesburg (South Africa).

Makolo said RwandAir has already secured an operating permit for Guangzhou, but the airline is waiting to hear whether it has secured its preferred slots from the Chinese authorities, with the aim of launching in May 2019. Likewise, RwandAir has clearance to serve New York on a codeshare and wet-lease basis, but this authority needs to be extended so it can operate its own flights. The Rwandan CAA is currently going through the required Federal Aviation Authority (FAA) audits to make that happen. “That’s still a work in progress,” Makolo said.

Meanwhile, the 737 MAX 8s will be used to add services to Tel Aviv in Israel and intra-African flights to Addis Ababa (Ethiopia), Khartoum (Sudan), Lilongwe (Malawi) and Luanda (Angola).

Makolo said Addis Ababa should launch in April, followed by Tel Aviv in May, while the rest are still in the “very initial planning phase”.

Continued
on Page 14



Yvonne Manzi Makolo on...

■ BEING A WORKING MUM...

Perhaps the most demanding part of Makolo's job is balancing her work as an airline CEO with the demands of being mother to two young children.

"After learning how to manage toddlers, you can manage anything – nothing scares you," Makolo said.

RwandAir has a very progressive attitude to women in leadership. RwandAir has a female CEO, chief financial officer, legal director and head of quality. This contrasts with the lack of female airline leaders in other airlines around the globe.

Makolo felt this keenly when she attended the 2018 International Air Transport Association (IATA) AGM. "I walked in and I asked where all the women were. We have so many women in decision-making positions. The lack of female CEOs in this industry is a bit strange. This industry is very much a boys' club."

Even RwandAir has work to do. The airline has around 150 pilots and only 5-10 are female. The proportions are similar for engineering functions. Makolo said. "We need to encourage more females in school to get into the industry. If Rwanda is positioning itself as an aviation hub, we will need as much talent as possible."

Makolo accepts that being an airline CEO requires long hours. "It's not about having fewer working hours, but more flexibility." She goes home for lunch with her family, but then works until very late. "That sort of flexibility, I think, will be very important in giving women the chance to rise to the top."

■ KIGALI'S MRO ASPIRATIONS

Makolo sees potential for RwandAir to do more maintenance work in-house in the future. However, the focus is on doing it right, rather than doing it quickly.

RwandAir currently partners with Ethiopian Airlines on its Q400 and 737 maintenance. Lufthansa Technik performs work on the airline's A330s, while Netherlands-based SAMCO Aircraft Maintenance performs work on the CRJs.

"In the long term, we want to establish our own maintenance facilities here in Kigali," Makolo said. "We are very much in the initial stages in establishing that, but we want to do it as soon as possible."

When asked whether this could take the form of a joint venture, she said all possibilities were open.

RwandAir currently does its own line maintenance and the airline would look to gradually build up its capabilities. "It would have to be progressive. I don't see us going straight to C checks. We would start with A checks and go all the way up," she said.

Safety is a major priority for RwandAir. The airline has just secured IATA IOSA certification for the third time.

■ RWANDA'S CARGO NETWORK

As RwandAir grows, so, too, does the country's cargo network. Makolo said A330 belly capacity on the Brussels and London flights is being used to ship fruit and vegetables out of the country.

"At the moment, we are looking at filling the belly capacity, but down the road we are aiming at dedicated freighters as well," she said, adding that available belly capacity can be a challenge during the peak season.

The move towards dedicated freighter operations is about five or six years away. In the meantime, growing demand for cargo will be met by belly capacity from RwandAir's incoming wide-bodies.

CONTINUED FROM PAGE 12

RwandAir has no plans to open new hubs, beyond the single 737 that it has based in Cotonou, serving Abidjan (Côte d'Ivoire), Dakar (Senegal), Douala (Cameroon) and Libreville (Gabon).

"The initial plan was to set up a joint-venture [airline] with the government of Benin. This has been a bit slow, but we continue to operate [from Cotonou] using seventh-freedom rights," Makolo said. The aim was to grow the network from Cotonou, but if the joint venture does not materialise, RwandAir will have to reevaluate its future strategy for the Benin hub.

"We have had a lot of interest in us setting up airlines [in other countries], but we still have a lot to do with our Kigali hub," Makolo said.

Within Africa, RwandAir does not struggle for route rights – but making changes on existing routes can be tricky. "We do have challenges with some countries when we want to change our schedule, or get fifth-freedom rights," she explained. "When you want to tweak anything, you are met with all these stumbling blocks."

As RwandAir's management focus is currently on optimising revenue – and, therefore, tweaking and consolidating its network – this is a challenge.

RwandAir is now leveraging the brand recognition that it has built up over recent years, offering competitive fares instead of engaging in price wars with the competition. "The growth in passenger numbers and revenues has been very

encouraging and we hope to see that continue," she said.

The rapid expansion is an ongoing challenge, which creates pressure in itself. Makolo said this makes it important for the team to regularly do a "sanity check" on the airline's strengths and weaknesses. "That's really our focus going forward," she said.

This opens the door for partnerships and joint ventures, especially when it comes to human resources, training and maintenance. "We are always open in terms of partnering – it is important to work together, especially with other African airlines. We want to leverage that as much as possible, especially with smaller airlines, to get economies of scale," she said.

To cope with RwandAir's growth, the government is boosting the capabilities of state-owned training company Akagera Aviation.

"Akagera has already started training 20 cadet pilots for us and the idea is that they will train our pilots, engineers and cabin crew," Makolo said. "Given the pilot shortage, this is becoming more and more of a challenge for us. One of the reasons why Akagera has to be at full capability as soon as possible is because we need pilots."

The skills shortage also extends to headquarters staff, as well as commercial and station managers.

"Getting people to manage this massive expansion is a challenge," Makolo said.

One of the growing pains that is currently

under control is airport capacity. The terminal at Kigali has just been expanded and a new airport – Bugesera International – is scheduled to open in 2020. "At the moment, we have what we need for our current plans and we will be moving completely to the new airport."

Over the next five years, RwandAir plans to nearly double its fleet and grow from 1.2 million passengers to around 2 million.

Makolo said the cost of growth and high fuel prices mean that RwandAir is not currently profitable, but the plan is to deliver a profit within the next few years.

"I have gone from making a lot of money in the telephone industry to burning a lot of money in the aviation industry," she jokes.

Did Makolo think she would ever be RwandAir CEO? "Not in a million years, but I enjoy it – it's definitely not boring."

"It's stressful and long hours, but there's always something new happening and you see the results immediately; you don't need to wait weeks and months. Everything is moving so fast and is so new – it's such a revelation for me. I find myself fascinated with every small thing that happens."

By the time we end the interview, it is clear that Makolo may not have an airline industry background, but she has all the skills needed to successfully connect Rwanda with the rest of the world. ■

SOMMAIRE

YVONNE MANZI MAKOLO CONNECTE LE RWANDA

Yvonne Manzi Makolo fut nommée directrice générale de RwandAir en avril 2018. Sans expérience préalable dans le secteur de l'aviation, elle a relevé le défi en moins d'un an. Victoria Moores l'a rencontrée.

Selon Yvonne Manzi Makolo, l'objectif principal de la compagnie aérienne est de soutenir l'économie du Rwanda, un pays enclavé avec un transport routier coûteux et difficile.

Lorsqu'elle intégra l'équipe de RwandAir, la compagnie exploitait environ 20 liaisons. Depuis, Londres et Bruxelles ont rejoint le réseau et un nouveau hub a été ouvert à Cotonou (Bénin). Aujourd'hui, elle dessert 26 destinations et continue de croître.

RwandAir opère 12 avions, dont deux A330, six B737NG, deux CRJ et deux Q400.

En 2019, RwandAir mettra en service deux A330neo et deux B737 MAX 8 en location, pour davantage soutenir la croissance que pour les remplacements.

Les A330neo desserviront les vols long-courriers vers Guangzhou (en 2019) et New York et renforceront les capacités sur Dubai, Lagos et Johannesburg.

Entretemps, les B737 MAX 8 permettront d'ajouter des services vers Tel Aviv et des vols intra-africains (Addis-Abeba, Khartoum, Lilongwe et Luanda).

RwandAir ne prévoit pas d'ouvrir de nouveaux

hubs, outre le B737 basé à Cotonou, desservant Abidjan, Dakar, Douala et Libreville.

L'objectif initial était de développer le réseau depuis Cotonou mais si le projet à capitaux mixtes ne se concrétisait pas, RwandAir devrait réévaluer sa stratégie future concernant le hub du Bénin.

RwandAir se focalise sur l'optimisation des revenus, et donc l'amélioration et la consolidation de son réseau est un défi.

Face au défi permanent que représente une expansion rapide, il est indispensable selon la DG de jauger les forces et les faiblesses de la compagnie.



Cela ouvre la voie à des partenariats et des projets à capitaux mixtes notamment en matière de ressources humaines, de formation et de maintenance. Elle souligne l'importance de travailler avec d'autres compagnies africaines.

La croissance de RwandAir oblige, le gouvernement renforce les capacités de l'organisme de formation public Akagera Aviation pour former des pilotes, des ingénieurs et des PNC.

La capacité aéroportuaire est quant à elle sous

contrôle. Le terminal de Kigali a été étendu et le nouvel aéroport, Bugesera International, devrait ouvrir ses portes en 2020.

RwandAir prévoit de doubler sa flotte au cours des cinq prochaines années pour passer de 1,2 million de passagers à environ 2 millions. Même si actuellement RwandAir n'est pas rentable en raison du coût de la croissance et des prix élevés du carburant, Yvonne Manzi Makolo soutient que l'objectif est de faire des bénéfices durant les prochaines années.

Pour cette mère de deux enfants, la flexibilité est capitale pour concilier vie familiale et professionnelle.

Selon elle, le Rwanda a une attitude très progressiste à l'égard des femmes dirigeantes. Il faut encourager les filles à se joindre à l'industrie.

Sur le plan de la MRO, RwandAir souhaite à long terme établir ses propres installations à Kigali. La sécurité demeure également une priorité majeure pour RwandAir.

Enfin, au fur et à mesure que RwandAir se développe, le réseau de fret du pays s'étend également. La transition vers des opérations dédiées se fera d'ici cinq ou six ans.



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*Tunisian businessman and politician
Mohamed Frikha tells **Martin Rivers** why he is
bringing Syphax Airlines back from the dead.*

THE PHAX OF LIFE

«Redonner vie à Syphax » – Page 18

Mohamed Frikha could not have picked a worse time to establish his airline than 2011, the year in which Tunisian President, Zine El Abidine Ben Ali, was ousted in a popular revolt that served as the spark for the Arab Spring uprisings.

Although it seemed like a period of renewal and change in Tunisia – and, indeed, the north African country has fared much better than its neighbours in the years that have followed – fortune was not smiling on Syphax.

Flag-carrier Tunisair threw down the first hurdle by instructing its ground-handling division to block its rival's very first flight. Then airspace in Libya – a vital market for any Tunisian airline – was shut down as that country spiralled into civil war.

Soon after, a pair of Daesh terror attacks targeting holidaymakers in Tunis and Sousse decimated tourism demand in Tunisia. And, finally, technical problems with the airline's Airbus A330 grounded its only long-haul route to Montreal.

"We did not have luck," Frikha shrugged, speaking via video link between the Tunisian and French offices of Telnet Group, the technology company he launched in 1994 and which has been hailed as a model for Tunisian entrepreneurship.



Back in the game: The airline took delivery of two Bombardier CRJ-900s in the summer.

"For a start-up company, the first three years were very difficult – the flights to Libya stopped and all the tourist flights were cancelled. We were obliged to stop our activities."

Syphax's grounding in July 2015 seemed to mark the end of Frikha's strategy of building an intercontinental hub that would link Africa and Europe via Tunis, with spokes also extending to key cities in North America and east Asia. Its A330 and two A319s were returned to their lessors, and an order for six A320s was scrapped.

The airline's demise also snatched away air connectivity from Sfax, Tunisia's second largest city and Frikha's home town, which has always lacked the busy flight schedules of smaller but

more tourist-friendly destinations like Djerba and Monastir. Despite having a population of 350,000, barely two flights a day take off from the city.

With millions of dollars of outstanding debts, thousands of angry customers, and a state-owned rival happy to restore its monopoly on scheduled flights, few believed that Syphax would return.

But Frikha never lost sight of his dream.

"The first time when Syphax was stopped all the people said, 'It's finished. Syphax is dead'," he recalled.

"I'm the only person who said, 'No, Syphax will come back' – because I want to come back



“If we negotiate the support of the European community with this open skies agreement – if we have support for training, for the development of the airports – we can have a success story in aviation like we now have a success story in industry.”

MOHAMED FRIKHA

and fulfil my obligations. It's very important for my reputation and for the reputation of the civil aviation [sector] in Tunisia. And it's very important for the country also – [to show] that we take our commitments to the European and American companies seriously.”

Though dissolving the airline would have been an easier and less costly option, Frikha has spent the past three years drafting a strategy to restructure its balance sheet and repay everyone left out of pocket.

He likens the recovery plan – which has been approved by the court in Sfax – to a Chapter 11 reorganisation in America. As well as providing immediate compensation for passengers affected by the failure, it lays down a decade-long roadmap to clear the company's debts.

“We have the people that haven't used their tickets... The first thing we will do is reimburse them and we will give them also free flights, because they have waited for us,” Frikha pledged.

“We have many providers from Tunisia and also from France – like the French Civil Aviation [Authority], the airport companies, Eurocontrol – and with these providers we will do the necessary to respect our commitment and to pay them for their debt.

“Then we have the people who are [invested in Syphax] in the stock market. For these people, also, Syphax can come back and the stock can have value.”

Describing his desire to meet these obligations as a “personal challenge”, Frikha said expectations are particularly high because of his recent ascension to the political sphere. The businessman entered Tunisia's Parliament in 2014 as a deputy for Ennahda, the moderate Islamist party that surged to power after the 2011 revolution. Although it fell into second place in the 2014 election, Ennahda remains a key powerbroker in the country's coalition government.



Not content with his parliamentary role, Frikha even launched a presidential bid in the same year by running as an independent. The campaign failed to attract many votes but succeeded in raising his profile.

With key figures in Tunisia's business and political landscapes now lending their support – or at least reining in their opposition – Frikha is tantalisingly close to re-launching Syphax.

The airline took delivery of two Bombardier

CRJ-900s in the summer, leasing the 90-seater aircraft from Spanish regional carrier Air Nostrum. It plans to soft-launch operations as an aircraft, crew, maintenance and insurance (ACMI) provider upon receipt of its air operator's certificate (AOC), which was believed to be imminent.

“It will take some months until we will have traffic rights and our programme for flights,” Frikha said, suggesting a launch date of spring 2019 for regular operations. “For this period, we will lease the aircraft in ACMI mode.”

When Syphax begins its scheduled operation, the CRJ-900s will be put to work linking Tunis, Sfax and Djerba with destinations in Algeria, France, Italy and Spain. Paris and Toulouse are likely to be among the first route launches.

Mohamed Hamdi, a former director of Nouvelair, Tunisia's main charter carrier, has been appointed chief executive. Though not as well-known as some of his predecessors – notably Mohamed Ghelala, the former president of the African Airlines Association (AFRAA), and Christian Blanc, the former boss of Air France – Hamdi has local expertise and an understanding of how to avoid confrontation with Tunisair.

Under his watch, Syphax will

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on Page 18

CONTINUED FROM PAGE 17

become a very different animal to the company that ceased operations three years ago.

First, the carrier will no longer deploy narrow-body and wide-body jets in its own right. It plans, instead, to focus on regional operations, developing what Frikha sees as an under-served market in the Mediterranean basin.

“It’s a model which has [had] success in Europe. We have the example of Air Nostrum,” he affirmed. “Development of these kinds of flights in north Africa is very important. It’s more important in this region than in Europe, because in Europe behind the aircraft you have high-speed rail (TGV), you have highways – but in this region there are no highways, no quick trains.”

Frikha still believes that sixth-freedom traffic has a role to play at Syphax, citing the potential to connect towns in eastern Algeria, Libya and the Middle East with Europe via a stop in Tunis. But these flows will be pursued more cautiously than before.



The second strategic shift relates to Tunisair. Syphax was always seen as an enemy by the country’s flag-carrier, which suffers from a bloated workforce and legacy inefficiencies and has tried to minimise its losses by keeping a stranglehold on competition.

Unable to change practices at the parastatal, Frikha is extending an olive branch.

His new network will be designed to complement the state-run operation, providing feeder traffic for Tunisair’s medium-haul and long-haul flights while avoiding head-to-head competition.

Deploying low-capacity CRJ-900s will help Syphax steer clear of Tunisair’s mainline business. And, although the flag-carrier has a regional subsidiary of its own – Tunisair Express, which also has one CRJ-900 as well as two ATR 72-500s – it primarily focuses on domestic flights. Naples and Palermo in Italy and Malta are the subsidiary’s only scheduled international routes.

“The regional flights [from Tunisia in general] are not very developed and we will not be a competitor to Tunisair Express,” Frikha stressed.

In a meeting with Elyes Mnakbi, Tunisair’s boss, Frikha even gave the flag-carrier first refusal to wet-lease Syphax’s CRJ-900s.

The third change to Syphax’s business model could be the most dramatic, though details are thin on the ground.

As well as cooperating with Tunisair at home, Frikha wants to find a strategic partner in Europe or the Middle East – specifically one that has A320s or Boeing 737s and is in need of operational and technical support. In short, Syphax plans to broaden its business activities to include pilot qualification, maintenance, repair and overhaul (MRO) services, and some form of operational “off-shoring” – growing its



Pointing the way ahead: Mohamed Frikha has big plans for Syphax Airlines.

capabilities markedly but without stepping on Tunisair’s toes.

“With our partners, we will develop our activities, and not necessarily from Tunisia,” Frikha explained.

“Today, some very important companies have to leave their aircraft on the ground because they have no crew, because they have problems for the maintenance of these aircraft.

“We, in Tunisia, have this [human-resources] capacity. What we offer to our partners is to improve their mechanics and all the operation for these aircraft. And our partner can use our capacity.”

He said Syphax is ready to qualify hundreds of local flight crew as well as open a maintenance base, harnessing the country’s low-cost workforce to the advantage of foreign airlines. ■

SOMMAIRE

REDONNER VIE À SYPHAX

Mohamed Frikha, homme d'affaires et politique tunisien, a expliqué à Martin Rivers pourquoi il compte ramener Syphax Airlines à la vie.

Mohamed Frikha n'aurait pas pu choisir pire moment que 2011 pour lancer sa compagnie aérienne. Ce fut l'année où le président tunisien Zine El Abidine Ben Ali a été évincé du pouvoir par une révolte populaire.

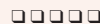
Ce fut le déclencheur des soulèvements du Printemps arabe.

Les équipes d'assistance au sol de Tunisair ont ensuite bloqué le premier vol de Syphax. L'espace aérien en Libye a également été fermé. Deux attaques terroristes de Daesh à Tunis et à Sousse ont plombé le secteur du tourisme. Des problèmes techniques de son A330 ont eu raison de sa seule route long-courrier vers Montréal.

« Nous n'avons pas eu de chance », soupire Mohamed Frikha. « Nous étions contraints d'arrêter nos activités. »

La disparition de la compagnie aérienne a également réduit la connectivité aérienne de Sfax, la deuxième ville du pays.

Face à des millions de dollars de dettes, des clients en colère et une certaine hégémonie de la compagnie nationale, ils n'étaient pas nombreux à croire au retour de Syphax.



Mais, Mohamed Frikha ne renonça pas à son rêve. Il a passé ces trois dernières années à élaborer une feuille de route sur 10 ans de même qu'un plan de redressement. Ce dernier a été approuvé par le tribunal de Sfax. Il comprend une indemnisation des passagers lésés et un engagement de la dette.

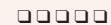
« Nous avons des personnes qui investissent dans Syphax Airlines sur le marché boursier », rappelle Mohamed Frikha.

L'attente est également forte pour sa remise en service étant donné que Mohamed Frikha a

récemment réalisé une incursion dans la sphère politique tunisienne. Il est entré au Parlement tunisien en 2014 comme député. Il est un homme “de pouvoir” dans le gouvernement de coalition du pays.

A la mi-2018, Syphax Airlines a pris livraison de deux CRJ-900 de Bombardier. Il s'agit d'avions en location auprès d'Air Nostrum. La compagnie prévoit de procéder à un lancement progressif de ses opérations dès la réception de son certificat AOC qui serait imminent.

« Cela va prendre plusieurs mois avant d'avoir les droits de trafic et notre programme de vols », tempère Mohamed Frikha. « Nous tablons sur un lancement au printemps 2019. »



Lorsque Syphax Airlines débutera ses opérations, les CRJ-900 seront mis en opération depuis Tunis, Sfax et Djerba sur des destinations en Algérie, en France, en Italie et en Espagne.

Mohamed Hamdi, un ancien directeur de Nouvelair, a été nommé directeur général.

Le premier axe stratégique de Syphax est de se concentrer sur des opérations régionales et de développer un marché mal desservi dans le bassin méditerranéen.

Le second concerne Tunisair. Le nouveau réseau de Syphax sera conçu pour être complémentaire aux vols gérés par la compagnie nationale tunisienne. Cela évitera une concurrence frontale avec Tunisair et Tunisair Express.

Le troisième volet concerne l'aspect commercial. Mohamed Frikha souhaite trouver un partenaire stratégique en Europe ou au Moyen-Orient disposant d'A320 ou de B737.

Syphax envisage également d'élargir ses activités pour inclure des prestations de services.

« Nous n'avons pas eu de chance. Nous étions contraints d'arrêter nos activités. »

MOHAMED FRIKHA

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PROPELLING THE NEXT CONNECTION

One of the small private airlines in Ethiopia, National Airways, is transforming itself from a charter flight operator to a scheduled flight service provider. **Kaleyesus Bekele** reports.

THE BIG ISSUES WITH BEING SMALL...

National Airways began its charter flight operation in 2009 in Addis Ababa, Ethiopia with one Beech 1900D aircraft.

The company has been providing charter flight services for VIPs, international aid organisations, construction companies, and mining and oil exploration firms operating in Ethiopia. It has also been operating charter flight services to South Sudan, Somaliland, and Puntland.

National Airways used to operate Beech 1900, Pilatus PC-12s, Fokker 50 and a Eurocopter EC-130-B4 to provide charter flight and air ambulance services.

There was a time in the past when the airline tried to provide scheduled domestic flight services but could not sustain the operation due to stringent aviation regulations in the country.

After several years of challenge, National Airways CEO and founder, Abera Lemi, seems determined to pursue his lifetime dream to have a full-fledged airline providing scheduled flight services in the horn of Africa.

To realise his dream, National Airways recently acquired five Embraer ERJ145 aircraft from a US company. "The 50-seater aircraft is suitable for both charter and scheduled flight services," Lemi said.

National Airways has been operating scheduled flight services between Addis Ababa and Garewe, a small commercial town in Puntland. On October 13, 2018, it made an historic flight to Mogadishu, Somalia. No airline from Ethiopia has flown to neighbouring Somalia in the past 40 years.

Ethiopian Airlines suspended flights to Somalia due to political tensions between the two countries in the 1970s.

National Airways landed its Embraer 145 aircraft in Mogadishu Aden Adde International Airport. "It was the first commercial flight operated

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“We are not allowed to operate bigger aircraft. That is why we acquired an aircraft, which has 50 seats. These days, because of the increasing price of fuel, you cannot be profitable if you operate small aircraft.”

ABERA LEMI



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New on the scene: National Airways recently acquired five Embraer ERJ145 aircraft from a US company.



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between Ethiopia and Somalia after four decades,” Lemi said.

Ethiopia and Somalia fought a bloody two-year border war in 1977-1978 that cost a heavy toll on both sides. Since then, there have been no commercial flights directly connecting the two countries, which share a long border.

Lemi said that as there is a large Somali diaspora community in various countries, the demand for air travel to and from Somalia is huge. “We are happy to serve the Somali people,” he said. There are a large number of Somali people residing in Ethiopia and Ethiopian Airlines launched direct flights between Addis Ababa and Mogadishu on November 9, 2018. “There is enough market for all of us,” Lemi said.

National Airways provides charter flight services in Ethiopia and to neighbouring countries including Djibouti, South Sudan, Sudan, Kenya, Somaliland and Somalia.



National Airways is planning to start more scheduled flight services to neighbouring countries. “We are planning to go to Hargeisa, Somaliland and Bosaso, Puntland and Juba, South Sudan,” Lemi said. “We want to contribute our share in improving air connectivity in the horn of Africa.”

Though there are eight private airlines registered in Ethiopia, National Airways is the only one that is operating scheduled flights. The national carrier, Ethiopian Airlines, is the only carrier that operates scheduled domestic flight services.

National Airways is also planning to start scheduled flight services within Ethiopia. “We want to start domestic flights from Addis Ababa to Bahir Dar, Gondar, Mekelle, Dire Dawa, and Jijiga cities. We want to offer alternatives in the domestic routes,” Lemi said.

Ethiopia’s economy is one of the fastest growing in Africa. Addis Ababa is the seat of the African Union, the United Nations Economic Commission for Africa (UNECA) and other regional and international organisations. “So there is a huge demand for air transport services, both in the domestic and regional routes. The

potential for the development of the local air transport industry is huge,” Lemi said.

However, there are lots of challenges facing private operators in Ethiopia. Unlike other African countries, general aviation in Ethiopia is at its infant stage. The growth of private airlines is dwarfed by restrictive regulations.

According to Lemi, the working environment is not favourable for private airlines. He said that the Ethiopian Civil Aviation Authority (ECAA) has imposed protective regulations on private airlines that favour the national airline, Ethiopian Airlines.

Private airlines are not allowed to operate aircraft with more than 50 seats. Many complain that the seat limitation is imposed by the government to protect the state-owned Ethiopian Airlines, which, they say, is unfair.

“We are not allowed to operate bigger aircraft. That is why we acquired an aircraft, which has 50 seats. These days, because of the increasing price of fuel, you cannot be profitable if you operate small aircraft,” said Lemi. “We have been complaining about the restriction for many years and no one is willing to do anything. What is the rationale behind restricting the type of aircraft private airlines can operate? We should be able to acquire Boeing aircraft with 150-200 seats if we can afford it. Ethiopian Airlines is going to sell shares to foreign companies. So who is it that the government wants to protect?”

Lemi said that the small private airlines couldn’t be a threat to Ethiopian Airlines. “We are too small to compete with Ethiopian. Our business models are different. But we are unfairly treated,” he lamented.

According to Lemi, private airlines are not allowed to build maintenance hangars at the Addis Ababa Bole International Airport. “Ethiopian Airports has denied us a plot of land for hangar construction,” he said.

Lemi believes that private airlines can play a role in boosting trade and tourism. However, he said, there is no conducive environment that allows the growth of private airlines.

“The private airlines in other African countries are very strong. They may not have a strong national airline but they have strong private airlines. If you see our neighbour, Kenya, there are dozens of private airlines that provide

scheduled domestic flight services. They also have a vibrant general aviation sector. They have a dedicated airport for general aviation, Wilson Airport in Nairobi.

“When you come to Ethiopia you have a very strong national carrier but general aviation is at its infant stage. And business aviation is non-existent.”

A few years ago the ECAA, in collaboration with the Ministry of Transport, drafted a new aviation policy encouraging private airlines. The draft policy proposed to lift the seat limitation and allow local private airlines to operate scheduled flight services, among other things.

It has been more than two years since that draft policy was submitted to the Council of Ministers for endorsement. However, to date, it has not been endorsed.



ECAA director general, Colonel Wossenyeleh Hunegnaw, said the draft aviation policy was returned to the Ministry of Transport for amendments. “ECAA should rewrite the draft due to a change in policy issues,” he said.

Hunegnaw hopes that the aviation policy, when finalised, will address most of the private airlines’ concerns.

Lemi argues that it is time to liberalise the domestic air transport market in Ethiopia after the African Union took a bold step of establishing a single African air transport market (SAATM). “African countries have agreed to allow African airlines to freely fly in Africa. So it is a high time for Ethiopia to permit indigenous private airlines to operate scheduled domestic and regional flights without any restriction,” he said.

In 2012, National Airways established the National Aviation College, which trains professionals in various disciplines, including cabin crew, airline customer service, airport operation, airline ticketing and reservation.

In addition to the existing courses, the college is preparing to start aeronautical engineering and piloting courses.

Lemi said that if the government can address policy issues, National Airways has big expansion plans. “But, at the moment, we are not able to plan our growth,” he concluded. ■

Phasing out: The old Antonov freighters.



Media reports of sharp contractions in Africa's air cargo market are not all they seem, reports Alan Dron.

Figuring out the reasons for Africa's weight loss

Air cargo statistics are notable for strong upward and downward movements, depending on the health of the global economy.

One of the first signs of an impending recession is often a fall-off in the amount of freight traffic moved by air as companies start to pull in their horns, perhaps a year or more before the recession actually bites.

Similarly, an upturn in air freight volumes normally precedes a general improvement in world economies, as organisations start restocking with raw materials and goods.

The International Air Transport Association (IATA) freight statistics, issued in October, noted that in August, the latest month for which figures were available, African air cargo transport had contracted by 7.1% when measured in freight tonne kilometres (FTK) compared to August 2017, and that this was the fifth time in six months that demand had shrunk.

Having peaked in seasonally adjusted (SA) terms at the end of last year, FTKs look to have stopped declining in SA terms in recent months,

although they remained 8% lower than their November 2017 peak. More widely, demand remained weak on all the key markets to and from the continent.

Available capacity for cargo in Africa actually increased by 6%, which resulted in a 2.8% fall in freight load factors (FLF) across the continent, to just 19.7% across all flights, to from and within Africa.

Overall, Africa had just a 1.9% share of the global air freight market last year.

□□□□□

However, said IATA's head of industry analysis, Andrew Matters, the figures showing a sharp drop in African air freight had to be put into context as 2017 had been a particularly strong year, which meant that 2018's figures tended to pall when compared to the previous 12 months. "The level of African FTKs is still actually very high," he confirmed.

"For an extended period between 2014 to the latter part of 2016, the level of FTKs flown by

African airlines was very stable. What we saw from the end of 2016 to the end of 2017 was substantial growth in African FTKs; we see a distinct shift in level.

"The level of FTKs has stepped up and is much higher than the 2014-16 period. The growth rate for FTKs in 2017 for African airlines was essentially 25%, year-on-year."

This was partly due to some African economies benefitting from the rise in oil prices and the generally sound economic backdrop. There was also strong foreign investment from the Asia-Pacific region as a whole, particularly, but not only China, said Matters. Increased freight and passenger flows were associated with that surge in investment, he added.

On top of that, a couple of large African carriers – notably Ethiopian – had expanded their operations.

"If you look at the Africa-Asia market, FTKs increased by more than 50% in 2017. That gives you an idea of how sharp the run-up was. The level has come back, but it's more a reflection of that previous very sharp rise.

Continued
on Page 26

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“In level terms, African air freight is actually doing pretty well. The story is considerably more positive than the [current] negative growth rate would suggest.

“As things have moved on this year, in some countries there’s increased instability – economic or social. For example, South Africa has lapsed back into recession.

“It’s very difficult to generalise about the African economy, because [different] countries are quite diverse. Overall, performance is generally solid, but there are certainly divergences across countries – large divergences, in some cases.



“The story for Africa in the longer term is a very positive one in terms of improvements in the air transport market, on both the passenger and freight side. We’re quite upbeat about longer-term prospects for the region.”

Factors such as the increasing number of countries signing up to an African ‘open skies’ agreement were very positive, he said.

Some issues, such as the extent of taxes and charges on air carriers and necessary improvements to infrastructure, still needed to be looked at.

“However, if you look at the growth rate for air freight in isolation, the story does look much worse than the reality.”

Why the freight market is getting tougher in southern Africa

A further insight into the African cargo market comes from Alwyn Rautenbach, cargo manager for South African airline Airlink.

“It’s difficult for me to speak about Africa as a whole, but what is happening in southern Africa is that Middle East carriers – Etihad, Emirates, Qatar Airways and Turkish – are operating more and more into airports such as Lusaka, Maputo and Harare.

“In our region, there was a lot of inter-country traffic for cargo via Johannesburg.

“Cargo would come in there for multiple customers, be split up and shipped onwards [to its final destinations]. Cargo now goes directly to those [other] airports. That affects inter-African cargo traffic.”

A “huge improvement” in road infrastructure in southern Africa has also recently occurred (largely financed with Chinese money), which enables armoured vehicles built in South Africa to be moved by surface transport.

And customs agreements between southern African states have further eased road transport arrangements.

“There’s more and more trade happening between

South Africa and southern Africa,” said Rautenbach. “There’s also a lot more food production in southern Africa that comes into South Africa.”

Cargo volumes for South Africa alone are consistently increasing, he noted – up by around 8% over the past year: “August and September were the first months this year where we’ve struggled. All previous months have seen increases of 13-15% in year-on-year figures.”

Rautenbach said cargo throughput at Johannesburg continues to grow and that freight traffic in southern Africa generally remains stable.

The great bulk of cargo is carried in belly holds, although there are a few dedicated freighters operating, ranging from Beech 1900s through ATR regional turboprops to Boeing 737s.

One other factor behind a downturn in cargo business is that, until recently, a number of Antonov and Ilyushin freighters were based in South Africa and extensively used for cargo operations.

However, the increasingly-elderly Russian types were chapter 2 aircraft in noise terms and South Africa finally phased out such aircraft in 2017, limiting their use to military airfields.

“There’s more and more trade happening between South Africa and southern Africa.”

ALWYN RAUTENBACH

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LA FUTURE AIR SAHEL ENFIN SUR LA PISTE

Le G5 Sahel trouve enfin un consensus pour la création d’une compagnie aérienne commune. Un pas décisif pour désenclaver des populations éloignées grâce à une connectivité aérienne tant attendue. Vincent Chappard rapporte.

Trois ans après la réunion historique des chefs d’Etat des cinq pays du Sahel à N’Djamena pour créer une compagnie aérienne communautaire, le Burkina Faso, le Mali, la Mauritanie, le Niger et le Tchad sont enfin parvenus à une solution consensuelle sur l’ouverture de leur espace aérien. La cinquième option a été entérinée en septembre dernier dans la capitale tchadienne.

« Nous avons mis par-dessus tout le sens de l’intérêt général qui tient compte aussi des intérêts de tous les Etats membres : personne ne sera donc laissé de côté. Nous sommes condamnés à avancer ensemble », a affirmé le ministre tchadien de l’Aviation civile et de la Météorologie, Mahamat Tahir Orozi.

Ce projet d’intégration est capital pour les populations de la bande sahélienne qui sont isolées par un manque d’infrastructures terrestres.

Selon le secrétaire permanent du G5 Sahel, Maman Sambo Sidikou, la compagnie aérienne commune bénéficiera notamment de l’excellente visibilité des cinq pays et démontrera que « le G5 Sahel est réellement en train d’œuvrer pour le décollage économique de la sous-région ».

Le schéma d’opérationnalisation de cette option sera soumis au comité des ministres en janvier 2019 à Nouakchott.

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Against an unfriendly operating environment, characterised by multiple airport charges, tough competition and aggravating aero-politics, four-year-old Air Peace remains Nigeria's fastest growing airline. Chukwu Emeke found out more from Air Peace chairman, Allen Onyema, who says...

GIVE PEACE A CHANCE

Air Peace has just signed a deal with Boeing for 10 B737MAX jets – a move that will expand its fleet to 37 aircraft and prove something of a breakthrough for Nigeria.

After the liquidation of the country's former national carrier, Nigeria Airways, in 2003, none of the local airline operators had the capacity to acquire new aircraft until Arik Air came on board, acquiring Bombardier jets and signing deals with Boeing and Airbus.

However, the most modern commercial aircraft from Boeing, the B777 and B737MAX, were beyond the acquisition capacity of struggling Nigerian local operators until Air Peace, which launched scheduled commercial operations in 2014, took delivery of a B777 in February 2017.



The signing of the deal for 10 B777MAXs in September 2018 makes Air Peace the pioneer investor and operator of these types of aircraft in Nigeria.

The airline has also taken delivery of Embraer 145s.

Air Peace chairman, Allen Onyema, said the Boeing deal was driven by the need to fill the existing gaps in international air travel from Nigeria. He added that the decision to acquire the aircraft was not sudden, but constituted part of the company's business plan; increasing the airline's fleet to 37 would help to establish its integrity with the banks.

Onyema said the airline has trained more than 40 pilots within the last four years and has been gender-sensitive in its staffing, with a high percentage of women in its management team.

"We bought B777s and ordered the B737MAX because we want to start flying Lagos to Paris direct with the MAX," he explained. "We want to

fly Lagos-Frankfurt, Lagos-Milan and Kano-Dubai. We want to fly from Enugu to London.

"Sometimes, the B777s will fly to London through Lagos. The B777s are meant for China, Johannesburg and London because of the range. The B737MAX takes 180 passengers."

He said the airline had signed a code-share agreement with a "formidable" Middle Eastern international airline as part of its preparations for starting flights to the region, adding that the undisclosed partner airline operates flights into 36 cities in India and has already started integrating its systems with that of Air Peace.

It targets five weekly flights to Sharjah from Lagos and, subsequently, twice-weekly flights to Dubai.

"We are also working on getting permits to begin operations to Houston, London, Mumbai, Guangzhou-China and Johannesburg," he said.

The chairman pointed out that Air Peace has already applied for land in Lagos to set up a maintenance facility. It has also demonstrated the premium it places on safety and fleet maintenance by signing a multi-year aircraft spare parts deal with Embraer.

That deal is expected to cover more than 250 components for the six Embraer 145 jets it recently added to its fast-growing fleet in line with its drive to connect unserved and underserved domestic and regional routes under its subsidiary, Air Peace Hopper.

The Embraer deal makes Air Peace the largest operator of Embraer 145 jets on Africa's west coast.

"Most people have been saying that the west coast market is a goldmine but I don't see it," said Onyema. "Movement of businesses is now very slow; the traffic is not really there as we thought."

Of course, Nigeria has the largest market in the sub-region with many airlines coming into the country.

"Some operate up to 10 flights. The competition is becoming tough," said Onyema. "We have many airlines scrambling to get few passengers. That is what is happening on the west coast. The market will get better if the right things are done. The way to make the market grow is for us to have uniform charges across the board to make the single African air transport market (SAATM) meaningful."

Because of Nigeria's mixed safety record over the last decade, aircraft manufacturers were sceptical about dealing with the country's airline operators and discussing aircraft acquisition with them. Financial institutions, including Nigerian banks, lost interest in investing in aircraft acquisition.



Onyema said the airline's lead banker in Nigeria, Fidelity Bank, took a gamble to deal with Air Peace and has not been disappointed.

The airline has taken delivery of two of its four B777s, which have capacity for night flights. Unfortunately, most airports in Nigeria do not have facilities for night flights – the implication being the underutilisation of the aircraft.

The cost implications of unnecessary aircraft on ground (AOG) are likely to get worse when Air Peace takes delivery of the 10 B737MAXs ordered from Boeing. In most Nigerian airports, airlines only operate from 7am to 6pm and close shop. Onyema wants the authorities to equip the nation's airports with the required infrastructure to avoid a situation where there is an AOG: "Not because the aircraft is faulty but because it can't fly at night."

Onyema also pointed out that, although Air Peace has been designated by the Nigerian authorities to operate flights to several regional and international destinations, including Lome, Dakar and Abidjan, the airline has not been able

“It took the Senegalese authorities two-and-a-half-years to consider our proposal. Meanwhile, the airline operates flights into Nigeria. We need the government to help us with international aero-politics.”

ALLEN ONYEMA

to implement these because the countries involved have strategically taken steps to resist in an effort to protect their own airlines.

For instance, Askya and Air Cote D’Ivoire operate several frequencies into Nigeria but efforts by Air Peace to obtain permits from their home authorities to fly into such countries have been resisted with stiff conditions, including outrageous landing charges.

According to him, when Air Peace applied to the Togolese authorities for permits to fly into Lome, the airline was slammed with high charges after a one-year delayed response to the application. When the airline threatened litigation, the Togolese authorities wrote a letter of apology to Air Peace.

“When we applied to Cote D’Ivoire, the totality of charges slammed on us was more than \$10,000. Air Peace has so far, lost more than N1 billion (\$2.75 million) in six months operating flights to the west coast,” he said, adding that the

airline is spending so much on its west coast operations as a result of the high charges.

“It took the Senegalese authorities two-and-a-half-years to consider our proposal. Meanwhile, the airline operates flights into Nigeria. We need the government to help us with international aero-politics,” he said.



He called on the Nigerian Government to support local airlines, after designating them for international operations, by insisting that the governments of such designations allow Nigerian airlines to come to their country.

“It’s one thing for the government to designate you; it’s another for the government of that country to give you a permit to operate into that country,” he explained.

Onyema admitted that, because of the poor corporate governance demonstrated by some

local operators in the past, resulting in failures and a loss of credibility in the international community, his airline had suffered demonstrations of pessimism by some of its stakeholders. He appealed to those who ‘de-market’ Nigeria’s aviation industry, based on the past, to understand that the aviation sector is dynamic, especially with the advancements in technology.

For instance, he explained: “In seeking to obtain certain permits and certifications some years ago, the applicant merely needed to submit documents to the authorities being approached. But, today, most of them request the physical presence of the aeroplanes in question.” This, he pointed out, contributed to the non-operation of the airline’s first B777 for some months, even after delivery.

He noted that some new clearance processes in the sub-region added cost disadvantages to the intending operator. ■



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Air Austral et Air Madagascar consolident leur partenariat stratégique dans un contexte concurrentiel de plus en plus agressif. Vincent Chappard a échangé avec le PDG d'Air Austral Marie-Joseph Malé, sur les enjeux du transport aérien dans l'océan Indien.

PARTENARIAT DE L'OCÉAN EN HAUT DE LA VAGUE

« Ocean partnership on crest of the waves » – Page 32

Le 30 novembre 2017, Air Austral entrait au capital d'Air Madagascar, qui après une période tumultueuse, retrouvait l'espoir de mettre en place son plan de transformation. L'un des fondamentaux du Business Plan construit pour « un développement conjoint harmonieux des deux compagnies » étant la « mise en résonance des hubs d'Antananarivo », de Saint-Denis de La Réunion, de Dzaoudzi (Mayotte) et de Paris CDG.

Après une année, les deux compagnies dressent « un premier bilan positif ». Il y a eu des avancées considérables comme le souligne le DG d'Air Madagascar, Besoa Razafimaharo. « Nous avons renforcé la robustesse de notre exploitation, nous nous préparons à présenter un produit renouvelé. Nous avons créé Tsaradia en un temps record ce qui démontre notre volonté et notre ambition de faire des dessertes domestiques une priorité. »

Il ajoute que le redressement de la compagnie malgache passera obligatoirement par la réussite et la solidité de ce partenariat.

Air Austral et Air Madagascar consolident leur coopération pour construire des synergies, alimenter et renforcer leurs réseaux. « Cette consolidation stratégique est nécessaire dans l'océan Indien dans un contexte concurrentiel de plus en plus agressif », souligne Marie-Joseph Malé.

Le développement de synergies conjointes concerne notamment l'optimisation des coûts par la mutualisation des achats (fuel, locaux, catering, MRO, handling et la formation).

Air Madagascar a modernisé ses outils de vente (vente sur Internet) et revu sa tarification. « Mutualiser nos forces de vente sur le marché français c'est la clé de la réussite ».

Il y a également une réelle adhésion et une fierté du personnel d'Air Madagascar à participer à ce développement.

Une remise à niveau de la flotte d'Air Madagascar

Les avions d'Air Madagascar furent longtemps cloués au sol en raison des difficultés financières. Ils sont progressivement remis en service. Quatre avions volaient il y a un an. Aujourd'hui,



Marie-Joseph Malé : « Cette consolidation stratégique est nécessaire dans l'océan Indien dans un contexte concurrentiel de plus en plus agressif. »

le nombre d'avions en opération a doublé avec un ATR, un A340 et deux Twin Otter supplémentaires. De 14 avions en 2017, la flotte globale des deux compagnies atteindra 20 avions en 2019.

Le Business Plan prévoit un renouvellement pour 2023 notamment de la flotte du long-courrier et l'ouverture d'une réflexion sur celle du moyen-courrier avec Airbus, Boeing, Bombardier et Embraer.

Renforcement et diversification des réseaux

Air Austral et Air Madagascar monte en puissance sur l'axe océan Indien-France avec plus de trois vols quotidiens, un réseau régional renforcé et des hubs connectés. La compagnie malgache a augmenté la fréquence Paris-Antananarivo de trois à cinq vols en haute saison. Le nombre de sièges a été doublé et la

réussite commerciale est au rendez-vous. L'objectif est de monter à terme en quotidien et six vols par semaine pour l'été 2019.

Pour le PDG d'Air Austral, la qualité des produits et des services est « au centre des priorités » de la compagnie. « Nous veillons à la constante modernisation de notre produit pour un service de haute qualité en business comme en classe économique. »

Air Austral et Air Madagascar ont franchi une nouvelle étape dans leur partenariat par le biais de la liaison Fort Dauphin-Tuléar-Saint-Denis, créant ainsi une passerelle aérienne entre le sud de Madagascar et La Réunion.

« Cette liaison est une avancée fondamentale pour l'ancrage de nos positions dans l'océan Indien. », affirme le PDG d'Air Austral.

La ponctualité des vols est un autre axe majeur de progression avec le projet PONCTU 85%. Elle est passée de 50% à 76%.

Nairobi, un gateway vers l'Afrique

Air Austral, Air Madagascar et Kenya Airways ont scellé un partenariat privilégié positionnant Nairobi comme un nouveau hub complémentaire d'Antananarivo et de Saint-Denis.

« Ce partenariat vient offrir à chacune de belles perspectives de développement. En alliant nos forces, nous ouvrirons à nos clientèles respectives l'océan Indien et l'Afrique continentale », affirme Marie-Joseph Malé.

Pour le PDG de Kenya Airways, Sebastian Mikosz, « Le trafic passagers entre l'Afrique et les îles de l'océan Indien a augmenté de 10%. Ce partenariat privilégié offre plus de choix aux voyageurs des îles Vanille et d'Afrique ».

Une stratégie de différenciation gagnante

Depuis cinq ans, Air Austral déploie une stratégie de différenciation qui lui octroie une bonne capacité de résistance. « C'est une réponse stratégique face aux risques et aux menaces d'un nouveau concurrent et pour ne pas nous fragiliser », explique son PDG.

Elle se décline sur trois axes : le développement de nouvelles routes

Continuer à la page 32

Un ATR de Tsaradia, filiale d'Air Madagascar.
En dessous: Un Boeing 787 d'Air Austral.
À droite: Un ATR d'Air Madagascar.



SUITE DE LA PAGE 31

via Mayotte ou encore Marseille (France), l'apport d'une valeur ajoutée pour la clientèle haute contribution (face aux compagnies low-cost) et le développement du trafic de correspondance.

Air Austral mise énormément sur le développement des correspondances à travers une harmonisation des horaires, le renforcement des fréquences et du programme pour améliorer les connexions via La Réunion, vers Madagascar, Maurice et Les Seychelles.

A noter aussi la progression de la filiale d'Air Austral, EWA Air, avec une augmentation de son trafic passager de 20%, le développement du hub de l'aéroport de Dzaoudzi (Mayotte) et une flotte renouvelée avec deux ATR 72-500. Elle permet également le renforcement de la desserte de Nosy Be.

Ainsi, pour la cinquième année consécutive, la compagnie réunionnaise enregistre des résultats positifs.

Air Austral compte développer son réseau vers l'Asie (Inde et Chine) avec l'ouverture de la desserte La Réunion-Canton. Air Austral s'intéresse aussi à l'Afrique du Sud. « Nous constatons une montée en puissance dans la région du canal du Mozambique notamment avec les projets gaziers. »

L'Alliance Vanille réactivée

Les représentants des compagnies aériennes de l'océan Indien ont réactivé leur alliance après une petite parenthèse. Le Pass Vanille sera à priori lancé en 2019. Elles veulent toujours œuvrer dans l'intérêt des populations de l'india-océanie pour que les billets soient plus attractifs et compétitifs. La politique tarifaire et une meilleure connectivité dynamiseront davantage le flux touristique intra régional.

Face à la concurrence, le PDG d'Air Austral lance un appel à « l'entraide » entre les compagnies de l'océan Indien. ■

SUMMARY

OCEAN PARTNERSHIP ON CREST OF THE WAVES

French airline, Air Austral, and local carrier, Air Madagascar, are continuing with their transformation plans – formalised in November 2017 – that are designed to develop their strategic partnership.

The business plan includes “the harmonious joint development of the two airlines”.

Air Madagascar CEO, Besoa Razafimaharo, said the first year had seen considerable progress.

He explained that the companies are preparing to present a renewed product. “We created a new local service – Tsaradia – in record time, showing our ambition to make domestic service a priority.”

The two airlines are continuing to build synergies to strengthen their networks and this strategic consolidation is vital, according to Air Austral CEO, Marie-Joseph Malé, in an increasingly aggressive competitive environment.



“The optimisation of costs through the pooling of purchases – including fuel, premises, catering, MRO, handling and training – is key to our joint success and, to this end, Air Madagascar has modernised its internet sales tools and revised its pricing,” he said.

For Malé, the quality of products and services is “at the centre of our priorities”, concentrating on quality in both economy and business class... plus punctuality, the latter having increased from 50% to 76% with the aim of reaching 85%.

Financial difficulties meant that much of Air Madagascar's

fleet was grounded but the aircraft are gradually returning to revenue-earning service. A year ago four aircraft were flying but that number has now doubled with an ATR, an Airbus A340 and two additional Twin Otters in service.

A year ago the combined fleets of the two companies comprised 14 aircraft. Now the fleet is planned to reach 20 this year.

The two airlines are gaining momentum on their flights between the Indian Ocean and France, with around three daily flights along with a strengthened regional network and inter-connected hubs.



The Malagasy airline has increased Paris to Antananarivo flights from three to five in high season and, with double the previous number of seats, this is proving commercially successful. The goal is to increase this to six flights a week for summer 2019.

The two airlines have now sealed a code share agreement with Kenya Airways, creating Nairobi as a new hub, in addition to those of Antananarivo and Saint-Denis.

“Nairobi, thus, becomes our gateway to the African continent, aiming to strengthen trade and tourism between the three countries and improve connectivity and routes within the region and between the island of Mayotte and Marseilles, as well as between Reunion, Madagascar, Mauritius and the Seychelles,” concluded Malé.

“We created a new local service – Tsaradia – in record time, showing our ambition to make domestic service a priority.”
BESOA RAZAFIMAHARO

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Africa has still not realised the full benefits of aviation, according to a panel of industry experts. Alan Dron finds out more at the launch of a new report setting out the sector's potential to drive the continent's economic and social sectors.

Agriculture, education, training and innovation are several of the major challenges faced by African nations that can be answered by the aerospace industry, according to a new report from Airbus.

The Great Enabler: Aerospace In Africa looks at aerospace technologies and their impact on socio-economic development on the continent.

The report was launched in Toulouse on October 30 in front of an audience including African government officials, business leaders, intergovernmental bodies and development organisations. It looks at how different parts of the aerospace industry could address challenges faced by the continent.

These could include:

- increasing access to healthcare;
- enhancing food security by making African agriculture more competitive and sustainable;
- promoting education, training and innovation;
- empowering businesses with innovative products and solutions; and
- breaking down barriers to the movement of people and goods across Africa.

"The aerospace industry offers solutions to many of the socio-economic challenges Africa is facing on the path to sustainable development," said Mikail Houari, president, Airbus Africa Middle East. "A paradigm shift from thinking about aerospace as an isolated industry to a key enabler of socio-economic change is necessary to realise its benefits for a prosperous future."

"That is what this White Paper is aiming at, by highlighting different ways in which aerospace technology can support social and economic development in Africa.

"We do believe in Africa. We are opening more offices. We're going there, not only to try to sell one product, but also to promote solutions based on our product and looking for long-term relationships."

The white paper analyses the role of aerospace technologies in sectors with the greatest possible impact on social and economic development, including manufacturing and industrialisation, civil aviation, agriculture, healthcare and humanitarian assistance:

- On manufacturing and industrialisation, many



The great enablers: Aerospace in Africa panellists during the launch event in Toulouse.

How to unleash the power of Africa through aerospace

African countries are final consumers in the global aerospace value chain. Joining the ranks of producers in this value chain is challenging for many but not impossible. The examples of Africa's current leaders in aerospace – South Africa, Tunisia and Morocco – demonstrate the complexities but also the opportunities for African countries to develop aerospace manufacturing and industrialisation capacity.

■ In the aviation sector, the key question remains how to connect people to markets and goods in a faster, cheaper and more efficient way in order to maximise the sector's role as an economic engine and a vehicle for greater integration in Africa.

■ Agriculture is perhaps the most consequential pillar of the continent's sustainable development. However, despite employing more than 60% of Africa's population, the sector contributes only about 15% of the continent's gross domestic product (GDP) as underlying challenges persist. Aerospace technology, such as precision farming, could potentially reverse this situation by enabling farmers to produce more with less.

■ Access to healthcare is still a challenge for many rural populations. While building on the existing technologies in the sector – such as air ambulances – new technology will further change the dynamics of access to medical care and emergency response in terms of quantity, distance and data collection.

The report also stressed the need for clear government policies to harness the power of aerospace technology.

One obvious area where aviation can help Africa achieve economic growth is in tourism. Elcia Grandcourt, director, regional department for Africa of the UN's World Tourism Organization, told the invited audience that tourism accounts for 10% of world GDP and that 63 million people flew into Africa in the first half of 2018, up 9% on the same period in 2017 and bringing in \$37 billion (up 8%).



African tourism numbers are expected to double by 2030. However, although intra-African connectivity is improving, there were still problems with Africans having to travel via hubs outside the continent, she said.

Bringing aviation to the forefront of politicians' minds was another ongoing problem, the event heard.

The single African air transport market (SAATM) was formally introduced in January 2018 and is designed to help intra-African travel and connectivity.

However, said Raphael Kuuchi, IATA's vice-president Africa, so far, no funding had been available to 'sensitise' African nations to the importance of SAATM. The African Union was



Mikail Houari (left): "Different ways in which aerospace technology can support social and economic development in Africa".

Girma Wake (centre): "Not all airlines even understood the benefits of SAATM".

Somas Appavou (right): "There were only 360 commercial aircraft in Africa... Turkish Airlines has more than that".

trying to mobilise the necessary money to remedy this.

During a question and answer session, it was revealed that the African Union, itself, had only a single aviation expert, and that person was actually a European Union consultant. The consultant had left the post over the summer and, as of September, no replacement had been found.

And, although the principles of SAATM had been in place since 1999, there had been a lack of implementation on the ground.

It was said the relevant authority had not been delegated to the 'executing agency' for SAATM, the African Civil Aviation Commission (AFCAC), which also lacked the relevant officeholder, who could take the necessary decisions to make SAATM a reality.

Kuuchi said that although some measures had been taken to ease air travel on the continent, such as the new, joint east African passport, heads of state had to monitor progress and should periodically ask AFCAC for an update on progress in implementing SAATM.

Girma Wake, the former CEO of Ethiopian Airlines, said that, unfortunately, not all airlines even understood the benefits of SAATM. Some smaller companies believed that the measure only benefited the larger carriers.

"This isn't true. Big airlines want to operate long-haul flights, not milk-stop-type flights. Small companies can." All sizes of airline should

work together to benefit Africa, he said.

Air Mauritius' CEO, Somas Appavou, asked if African countries really believed in aviation; there were only 360 commercial aircraft in Africa, he noted: "Turkish Airlines has more than that."

The value of aviation to Africa could be seen from the statistic that every new job created in the industry generated 10 others in the wider economy, he said. With so much unemployment in Africa, this was a valuable way to create gainful employment.



His company was working to develop an alliance with Kenya Airways, South African Airways and RwandAir. Two memorandums of understanding (MoUs) had been signed to help set this up and he hoped that, by early 2019, the participants would start to benefit from synergies between the four carriers.

Kuuchi noted that the growing African middle classes were deterred from travelling by air by the high cost of tickets.

Every international ticket in Africa typically included \$100-150 in various taxes and charges: "This is way off the global average, which is \$20-40." Fuel in Africa was also around 20% more expensive than elsewhere in the world.

He also noted that many African national

carriers had collapsed in the past due to political interference, both in the appointment of unsuitable executives and in flying to unprofitable destinations for political, rather than economic, reasons.

Bearing this in mind, he said that any government thinking of setting up a new national carrier should not try to run it: "Allow the private sector to drive it."

The report reached several recommendations, such as the need to compete by investing in people.

The report's authors noted that there was considerable action around building new skills and that new forms of training and incubation of entrepreneurs were filling in a shortfall in formal science, technology, engineering and mathematics (STEM) education, with aerospace demanding new skills.

It also stressed the need to collaborate and cross borders – between sectors, companies and countries – to remedy the fragmented economic development that had characterised much of Africa's aerospace sector in recent years.

"In air transport, the battle to open Africa's skies relies heavily, if not solely, on a collective outlook for unlocking the sector's massive social and economic impact in the long term," said the report. "The push to license pilots across borders and retain aviation talent is a powerful example of this."

The new Ugandan national carrier has signed up for two of the rarely ordered Airbus A330-800s for long-haul services.



Uganda flies the flag again

Uganda is rejoining the club of countries with national airlines as it seeks to recapture some of the revenue currently being taken by foreign carriers.

Alan Dron
reports.

Nature, they say, abhors a vacuum. So does commerce. Which is why foreign carriers flood into countries with no national airline, eager to pick up passengers that they know require air transportation services.

That is the case in Uganda, where it is estimated that some \$540 million a year ends up in the form of higher transport costs to passengers originating and terminating at Entebbe International Airport with non-Ugandan airlines.

Major African carriers, such as Kenya Airways and Ethiopian, have made inroads into the Ugandan market in recent years, as have the big Gulf carriers, such as Etihad Airways, Emirates Airline and Qatar Airways, plus Turkish Airlines, which has publicly said it aims to be the largest carrier on the African continent.

That is one of the reasons for the east African nation's decision to re-establish a national airline, four years after privately owned Air Uganda collapsed. The original state-owned Uganda Airlines was closed by the government in 2001.

"There's competition, but we intend to join the game and compete," said Ephraim Bagenda, CEO of the newly-revived Uganda Airlines. "We cannot just sit back and say 'There's too much competition, we can't do anything.' We will offer what we think will be a superior product."



A 2015 feasibility study by the Ugandan National Planning Agency (NPA) found that a new national carrier would "play a critical catalytic role in tourism development and promotion, export growth and investment in various priority sectors".

The NPA study noted the considerable economic benefits of having a Ugandan carrier to compete with foreign rivals: "Before 2007, Uganda did not have any locally based carriers and Kenya Airways was charging an average of \$420 for the Entebbe-Nairobi route. After Air Uganda started operations in 2007, prices went down to as low as \$182 and averaged about \$150 by the time of closure in 2014.

"When Air Uganda was closed, prices immediately shot up, averaging about \$500-\$700. RwandAir is charging average ticket prices of \$330 economy for the same route. As a result, it is important to establish a local-based carrier to reduce the cost of air travel."

The study also recommended that an investment in a

new national airline "should be considered as an infrastructure for enhancing the country's global connectivity and competitiveness, beyond the direct financial benefits".

The new Uganda Airlines came to widespread public attention at last year's Farnborough International Airshow in the UK, when it placed firm orders for four Bombardier CRJ900s and signed a memorandum of understanding for two Airbus A330-800neos.

Uganda Airlines will operate the slow-selling A330-800 – the only other buyer on Airbus' orderbooks for the type is Kuwait Airways – with a three-class cabin comprising 20 business, 28 premium economy and 213 economy seats, while the CRJ900 will have a dual-class configuration with 76 seats, including 12 first-class.



"We hope to take delivery of the first aircraft, a CRJ900, in February 2019," said Bagenda. "If all goes well, we will go on a marketing tour around Africa in conjunction with Bombardier. That will take six weeks while awaiting the arrival of the second aircraft, which will arrive towards the end of March."

At that point, Uganda Airlines will launch regional services in a network that will eventually grow to 18 destinations, including Nairobi, Kigali, Lusaka and Kinshasha.

Bagenda said the decision to opt for the A330-800 had been taken after a considerable amount of research: "It's just big enough for our kind of traffic." Rival aircraft were also considerably more expensive.

The fact that few other airlines had chosen the -800 variant was taken into consideration, but he and the Uganda Airlines team believe that more will follow.

Bagenda hopes initial destinations for the long-haul aircraft will include Guangzhou, London, Mumbai and points in west Africa.

"We look forward to providing the most modern passenger experience in regional aviation to the people of Uganda and across Africa," said Bagenda.

The airline will initially be state-owned, although government ministers have spoken of selling shares in the company once it is up-and-running.

*Saudi Arabian-based Nexus is rapidly gaining a reputation throughout Africa for service excellence. Now, as **Alan Dron** reports, it is being courted by a number of different countries on the continent.*

AFRICA JOINS THE NEXUS JET SET

When Abdullah Al-Sayed was running the Middle East operations of the world's largest executive jet company, he had a constant concern: What organisation could provide him with the type of ground-based services to match the quality that his aircraft were providing in the air?

"When I was CEO of NetJets Middle East, I was always asking my team 'Do we have a company to which we can sub-contract, so we can hand over all the flight operations to them?' We couldn't find such a company."



Perhaps no surprise, then, that in 2010, when Al-Sayed left NetJets, he decided to set up Nexus, his own flight services company. Since then, his staff has grown from seven to 700 in eight years.

The breakthrough came with a major oil company. "I said to them 'Just give us a try' and they gave us the opportunity." The relationship lasted for several years and has recently been renewed.

Jeddah-based Nexus does not own aircraft itself, but manages them for others and handles every aspect of ground-based flight services, from flight planning,

**African options:
Abdullah Al-Sayed
is looking to expand
Nexus across the
continent.**



dispatching and in-flight catering to obtaining visas, arranging ground transportation and maintenance.

Among the group's most interesting current projects is helping to establish a new national airline for Gabon.

The central African nation has not had a national carrier since Air Gabon collapsed in 2006 but, with the African airline scene at its most exciting for years, the government in Libreville is keen to establish its own flag-carrier once again.

Nexus has been shortlisted as organiser.

Al-Sayed is keen to get involved. However, with the history of African airlines being littered with the failures of state-run companies, he wants to ensure that both the private and public sectors are involved. "The government has to be a partner, but we also have to give opportunities to Gabon's private sector as well." This, he said, is because private enterprises tend to be less burdened by bureaucratic processes and can move faster in seizing opportunities.

"Gabon has been talking to us for two years and we're in the process of signing a memorandum of understanding (MoU) to put a joint venture together."

The Gabon opportunity came along because of Nexus' successful involvement in setting up RwandAir, one of the continent's most promising young airlines.



When Nexus got involved in the latter project, it realised that, although it came from a region with some of the world's most successful airlines, its strategy in Africa had to be different from that in the Middle East.

"It's no secret that Africa is one of the best 'virgin continents' in the world in terms of ambition. They are so hungry to develop their countries, but they usually get it wrong with their international partners."

The lack of corruption in Rwanda was notable, said Al-Sayed, and was a result of policy from the very top. "I give credit to HE President Paul Kagame," he said. "In the past 25 years since the tragedy of Rwanda's genocide against the Tutsis, his government had taken the small central African nation to the point where it was now the second or third-fastest growing economy in the world," he explained.

"We support RwandAir completely," said Al-Sayed. "We started out supporting 90% of it with our personnel. Today we are down to 10% and our objective is to train local people, then manage them.

"We provided flight operations support and ground operations. It's been an excellent relationship and gave us excellent experience and insight in how to run an airline."

Nexus also has a pilot training simulator in Kigali.

The success of RwandAir, which has established a small but efficient fleet of Airbus A330s, Boeing 737-700s and -800s, plus Bombardier CRJ900 regional jets and Q400 turboprops, has not gone unnoticed.

As well as Gabon, Nexus has been approached by Burkina Faso's president to set up and manage a new airline there and two other countries are also talking to the Saudi company about its involvement in new or existing airlines. ■

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This Cessna 208B EX is seen here during a patrol flight over Lagdo Lake in April 2018. The sortie was the first formation patrol conducted by the two Cameroonian Air Force Cessna 208s.

Inset: Each of the two Cameroonian Air Force Cessna 208s is fitted with an MX-15HDI sensor, which incorporates a high-resolution camera, a thermal imager and a laser illuminator.

PICTURES: ERWAN DE CHERISEY



Cameroon's eyes in the sky focus on Boko Haram

« La surveillance aérienne du Cameroun » – Page 40

Since May 2014, Cameroon has been battling the terrorist organisation known colloquially as Boko Haram.

Erwan de Cherisey takes a look at the country's capabilities.

Cameroonian forces are currently deployed in the far north region under three distinct operations: Emergence 4, which is headed by the commander of the fourth joint military region (RMIA 4); Alpha, which is a separate counter-insurgency effort of the elite rapid intervention battalions (BIR); and the multinational joint task force's (MNJTF) sector 1.

The latter is led by a Cameroonian general, and is made up of more than 2,200 troops, while Operation Alpha mobilises between 2,500 and 3,000 personnel, and Emergence 4 is made up of several thousand more.

The conflict against Boko Haram prompted an increase in airborne intelligence, surveillance and reconnaissance (ISR) assets, of which the Cameroonian Defence Forces (CDF) were almost devoid in 2014.

The elite BIR, a high-readiness component of the CDF under the direct authority of the Cameroonian presidency, were the first to introduce state-of-the-art airborne ISR capabilities in the field, with a number of unmanned air vehicles (UAVs) and a single Cessna 208B Grand Caravan EX aircraft

configured for surveillance and locally known as 'Phoenix'.

It was delivered to the BIR in October 2015 and is currently assigned to the Observation and Liaison Flight, based at Maroua-Salak Airport, in the far north region.

The former is part of the rapid intervention airmobile group (GIRAM), the BIR's main aviation unit, which is commanded by Lieutenant-Colonel Didier. It also flies Mi-24s, Bell 412s, and a single Beechcraft Super King Air 350ER.

Air and ground crew training took place in the US prior to the arrival of the aircraft in Cameroon.

The 'Phoenix' is powered by a Pratt & Whitney Canada PT6A-140 turboprop and has a Garmin G1000 avionics suite featuring three multi-function displays (MFDs).

The ISR suite comprises a Star Safire III forward-looking infrared (FLIR) optronic turret and an embarked control station. The former features a high-resolution colour camera and a thermal imager. A datalink provides a live feed between

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the aircraft and a ground control station at Maroua-Salak.

While part of the GIRAM, the Cessna 208B EX is tasked operationally by the BIR's air observation group (GOA), which also controls its UAV fleet.

A GOA officer is usually found aboard the aircraft to provide guidance during sorties on ISR aspects.

As Lt Colonel Alex (all names are withheld for security reasons), commander of the GOA in April 2018, explained at the time, 12% of the flying hours (outside training sorties) of the Phoenix were used to the benefit of the Nigerian Army, 17% in support of Operation Emergence 4, 5% for the 4th BIR of Garoua, in the north region, and the remaining 66% for Operation Alpha.

The 'Phoenix' has been involved in most major cross-border operations undertaken by the BIR inside Nigeria since late 2015 to destroy major Boko Haram bases.

In January 2018, the Cameroonian Air Force (CAF) received two Cessna 208B Grand Caravan EX aircraft configured for ISR duties. The aircraft were donated by the US Government (a formal handover ceremony took place at Yaoundé, on May 11) to enhance the CDF's intelligence-gathering capabilities, notably to support forces deployed in the far north. As noted by a US Africa Command spokesperson, overall value for the program is \$58 million.

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While the CAF is a relative newcomer regarding the use of dedicated ISR aircraft, it has moved at double speed to achieve full proficiency in the operation of its two new Cessna 208Bs.

The aircraft are part of the 322nd Reconnaissance Flight of the 32nd Air Squadron headquartered at Garoua's Air Base 301 (BA 301).

They feature a Garmin G1000 avionics suite and each is fitted with an L3 Wescam MX-15HDI turret, which incorporates a high-resolution daylight zoom camera, a thermal imager, as well as a laser illuminator, and an embarked control station.

A long-range communication antenna has been installed at BA 301 which, thanks to the aircraft's datalink, can receive live transmissions of sensor imagery up to 130 nautical miles.

Systems integration was carried out by North American Surveillance Systems (NASS).

A pair of L3 Scorpion ground station operator consoles (GSOCs) were also delivered. These are the main components of the ground control station, as they centralise aircraft sensor feeds.

To facilitate the deployment of the Cessna 208s throughout Cameroon, a mobile antenna has also been delivered, which can be set up anywhere in the country in just half a day, together with one of the GSOC.

SOMMAIRE

LA SURVEILLANCE AÉRIENNE DU CAMEROUN

Depuis mai 2014, le Cameroun combat l'organisation terroriste Boko Haram dans la région de l'Extrême Nord. Le conflit a entraîné un renforcement des capacités de renseignement, surveillance et reconnaissance (ISR) aérienne des Forces de Défense Camerounaises (FDC), qui en étaient presque dépourvues en 2014.

Les Bataillons d'Intervention Rapide (BIR), force d'élite placée sous l'autorité directe de la Présidence camerounaise sont les premiers à s'être dotés d'une capacité ISR aéroportée, en faisant l'acquisition de plusieurs drones et d'un Cessna 208B Grand Caravan EX configuré pour les missions de surveillance et baptisé "Phénix". Livré en Octobre 2015, il est rattaché à l'Escadron de Liaison et d'Observation du Groupement d'Intervention Rapide Aérien (GIRAM) basée à l'aéroport de Maroua-Salak. Les équipages et personnels au sol en charge de sa mise en œuvre ont été formés aux Etats-Unis avant son arrivée au Cameroun.

Le Phénix est doté d'un senseur FLIR Star Safire III, d'une station de contrôle embarquée et d'une avionique Garmin G1000. Une liaison de données permet la transmission en temps réels des images à Maroua-Salak.

Le Cessna 208B EX du GIRAM a participé à la plupart des opérations majeures des BIR au Nigéria conduites depuis la fin 2015 afin de détruire les bases principales de Boko Haram.

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En janvier 2018 l'Armée de l'Air du Cameroun a reçu deux Cessna 208B Grand Caravan EX configurés pour les missions ISR donnés par le gouvernement américain. Les appareils sont basés à Garoua, au sein de la 322ème Escadron de Reconnaissance du 32ème Escadron Aérien.

Tous deux sont dotés d'une avionique Garmin G1000 et équipés d'une sphère optronique L3 Wescam MX-15HDI qui comprend une caméra jour haute résolution, un capteur thermique et un illuminateur laser et d'une station de contrôle embarquée.

Une antenne de communication fixe installée à Garoua permet d'assurer la liaison en temps réel avec les Cessna 208 en vol jusqu'à 130 miles nautiques et de retransmettre les vidéos tournées par leurs caméras. Celles-ci sont centralisées via l'un des deux terminaux L3 Scorpion Ground Station Operator Console (GSOC) fournis par les américains. Une antenne mobile a également été livrée et peut être déployée n'importe où au Cameroun en une demi-journée, avec l'un des GSOC.

Les pilotes et personnels de maintenance destinés à opérer les Cessna 208 de l'Armée de l'Air ont été formés aux Etats-Unis en 2017. Cinq pilotes ont suivi un stage de conversion de 45 jours tandis que deux autres ont été qualifiés comme instructeurs au terme de trois mois et demi d'entraînement.

L'Armée de l'Air est très discrète concernant les opérations réalisées par ses Cessna. Cependant, le Général Benoit Eba Eba, commandant la Région Militaire Interarmées N°3 a expliqué qu'ils ont réalisés des vols de surveillance au-dessus du parc national de Boubou Ndjida dans le cadre de la lutte contre le braconnage et l'orpaillage illégal.

Once operational, the antenna can relay aircraft sensor feed from distances of up to 100 nautical miles. This means that if the mobile antenna and control station are positioned at Maroua, it is possible to maintain a live feed with a Cessna 208 operating almost anywhere in the far north.

Several L3 SPIDER portable terminals have also been received, which can be distributed to ground forces, providing them with their own independent live sensor feed. The SPIDER is similar in size to a standard tablet, although bulkier and heavier, and can relay images from aircraft operating at ranges of up to 16 nautical miles.

The Cessna 208s are not overly affected by the high temperatures found at Garoua, retaining an endurance of more than five hours. Standard operating altitude is usually below 10,000 feet to remain under the cloud cover.

Flying activity is intense with daily flights. By April 2018, the aircraft had each clocked more than 150 hours.

The personnel tasked with operating the aircraft undertook training in the US in 2017. Seven pilots and eight ground technicians were trained at Spartan College of Aeronautics and Technology.

The former undertook a 45-day conversion course, except for two of them who took a three-and-half-month instructor course.

Technicians qualified to undertake level 1 and 2 maintenance and servicing. As one CAF officer explained, the longer-term aim is to achieve level 3 proficiency.

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Sensor operators were trained by NASS, which also deployed a two-man support team at Garoua to provide additional training and technical assistance.

US instructors interviewed at Garoua praised the Cameroonian personnel's professionalism and fast learning abilities.

NASS in-country assistance concluded in November 2018, as per contractual obligations.

While the CAF discloses little information about its Cessna 208 operations, notably regarding any deployment to the far north, General Benoit Eba Eba, commander of RMIA 3, noted that the aircraft have conducted surveillance sorties over the Boubou Ndjida National Park, as part of anti-poaching efforts.

They have also been used to track illegal miners operating in the park, as well as to monitor illicit activity on the Lagdo Lake.

The campaign against Boko Haram has precipitated a major expansion of the CDF's ISR capabilities, significantly increasing its intelligence gathering potential.

However, with the continuing war, and new security challenges appearing elsewhere in Cameroon, it is likely that additional ISR assets will be required in the future.

African countries have traditionally provided a good market for Russian Helicopters, with more than 700 in active service across the continent. Now, as Jon Lake reports, the push is on to sell more.

Russian sales rush is on



Kazan Ansat, and the Mil Mi-38 that were emphasised during AAD 2018, together with the latest version of the Mi-8/17 family, the much improved Mil Mi-171A2.

The Kamov Ka-62 is a new version of the military Ka-60, optimised for the civilian market with a redesigned largely composite fuselage, a larger cabin with larger windows, Turbomeca Ardiden 3G engines and new avionics.

It made its first flight on May 25 2017, and Russian certification is expected this year, with European Aviation Safety Agency certification following in 2020. The aircraft carries 12-15 passengers and a maximum payload of 2,500kg.

The seven-seat Ka-226T is a powerful, light multi-role helicopter that uses the innovative coaxial main rotor system of previous Ka-226 models, combined with modern

avionics and full authority digital engine control (FADEC)-equipped 580hp Safran Arrius 2G1 engines.

Kazan's Ansat can be viewed as a Russian counterpart to Bell's Model



Top: Kazan's Ansat is a single-rotor, twin-engined helicopter with a four-bladed main rotor. As such, it represents a competitor to aircraft like the Bell Model 429.

429 GlobalRanger, similar in size, configuration and capabilities, and powered by similar Pratt & Whitney Canada engines. Kazan claim that the Ansat has the largest cabin in its class, and emphasise the type's multi-role versatility.

The multirole Mi-38 can carry 6-7,000kg of cargo or up to 30 passengers, or can be used as a search-and-rescue helicopter and flying hospital, or for offshore missions. Designed as a replacement for the Mil Mi-8 and the Mi-17, the aircraft is being marketed in both military and civil versions.

First flown on December 22 2003, the Mi-38 was certified on December 30 2015, and is now being offered with Klimov TV7-117V or Pratt & Whitney Canada PW127/TS turboshaft engines.

Though based on the original Mi-8/17, the Mi-171A2 combines many of the features of the original design with the latest technology in order to deliver outstanding levels of reliability, safety and comfort. It carries up to 24 passengers, or a payload of up to 5,000kg.

The latest fruit of the Russian Helicopters effort in Africa came with an order from the Government of Equatorial Guinea for two Mi-172 helicopters manufactured by Kazan Helicopters.

One of these is being delivered in the 12-seat Salon VIP configuration, while the other is in standard 26-passenger transport configuration. Two similar aircraft were previously delivered to Equatorial Guinea in 2006. ■

Russian Helicopters aircraft already in service across Africa include military and civil-registered types, and consist of new-build, refurbished and second-hand options. The company hopes to build on this success and was an enthusiastic participant at the recent Africa Aerospace and Defence (AAD) 2018 international exhibition in Pretoria, which it described as "one of the main platforms to promote rotorcraft in African countries south of Sahara".

Andrei Boginsky, director general of the Russian Helicopters Holding Company (part of the Rostec State Corporation) said: "Russian equipment is well-known on the African continent; it has a long and successful reputation of humanitarian missions and evacuation of people from disaster-hit areas.

"High-performance flight characteristics, reliability, capacity to operate within a broad range of conditions and temperatures make Russian-made helicopters one of the best options for the African market."



Boginsky concluded that the reliability and ease of operation of Russian helicopters, combined with a very competitive price/quality ratio, represented the foundation for continuing success.

He also highlighted the existence of a service centre for the maintenance of Mi-8/17 civil helicopters at Denel Aviation's premises in South Africa.

This helicopter servicing hub was launched with an agreement signed at the 7th AAD on September 19 2012.

As a result, Denel Aviation became the only company in sub-Saharan Africa accredited to perform maintenance, repair and overhaul (MRO) services for a range of models produced by Russian Helicopters.

The familiarity of the Mi-8/17 and the Mi-24/25/35 in Africa has ensured that these models have continued to sell, but Russian Helicopters is hoping that newer models will also find a market as the continent's economic development continues apace.

It was, therefore, the Kamov Ka-62 and Ka-226T, the

Above: With its boxy cabin and coaxial main rotors, the Ka-226 has a unique configuration in its class, but offers compact dimensions, precise hovering ability, excellent manoeuvrability and superb handling characteristics.

MORE CAYUSE WARRIORS FOR KENYA

Kenya is to acquire more MD Helicopters MD530F Cayuse Warriors, enhancing its ability to provide close air support and overwatch for ground forces in support of operations against Al Shabaab, writes *Jon Lake*.

The MD530F is a derivative of the original Hughes OH-6 Cayuse or 'Loach' – the US Army's main light observation helicopter during the Vietnam War.

The basic helicopter has been developed and upgraded, gaining greater performance and enhanced capabilities, under a series of manufacturers.

McDonnell Douglas acquired Hughes Helicopters in January 1984 and then, following the 1997 Boeing-McDonnell Douglas merger, Boeing sold the civil helicopter products to MD Helicopters Holdings in early 1999, keeping the military AH/MH-6 'Little Bird' series 'in house'. MD Helicopters Holdings was purchased in 2005 by Patriarch Partners, becoming MD Helicopters Inc (MDHI).

MD Helicopters Inc, under its charismatic chairman and chief executive officer, Lynn Tilton, has continued to develop the design, and, while Boeing retained rights to the 'Little Bird' for the US forces and some high-end allies, Tilton's company began development of Scout Attack Helicopter variants of the MD530F and MD530G in 2011.

These aircraft have become an extremely useful

An MD530F demonstrator and development aircraft with an older OH-6 flying chase. The pointed nose and T-tail were introduced with the model 500D and are a feature of all model 520s and 530s.



solution for US allies for whom the AH-64 Apache is 'too much helicopter' or to whom the AH-64 cannot be exported, and initial deliveries to the Afghan Air Force began in 2015.

In September 2017, MDHI was awarded a five-year, firm-fixed price indefinite delivery/indefinite quantity (IDIQ) contract to provide an estimated 150 armed MD 530F Cayuse Warrior aircraft to US and partner nation army aviation forces in support of US Army foreign military sales (FMS) opportunities.

The contract also included the required production

support services, including programme management, delivery support, pilot training, and maintenance.

The Kenya Defence Force ordered six armed MD 530F attack helicopters on September 27 2018, and a delivery order was issued against MDHI's five-year, \$1.4 billion IDIQ contract.

Initial deliveries to Kenya will take place in April 2019, and all aircraft will be delivered by August 2019.

Kenya is already a major operator of earlier 'Loach' variants, which serve with the 50th Air Cavalry Battalion at Moi Air Base, Mombasa.



Above: Three of the new Fennecs performed a low flypast at the handover ceremony.

Left: Dignitaries gathered for the formal handover of Kenya's new Fennec helicopters at Laikipia Air Base. Right: Major General Francis Ogolla (right) hands over the ceremonial key for the new Fennec unit – No.655 Squadron.



Kenya takes ex-Emirati Fennecs for anti-insurgency ops

The Kenya Air Force (KAF) has taken delivery of nine Eurocopter AS550 Fennec light helicopters from the United Arab Emirates (UAE), writes *Jon Lake*.

They will boost the African air arm's capabilities in its long-running campaign against Islamist Al Shabaab insurgents from neighbouring Somalia.

The aircraft join an unknown number of Bell AH-1 Cobras donated by Jordan, and newly purchased AgustaWestland AW139s and McDonnell Douglas Helicopters Inc MD530F Cayuse Warriors, joining an existing fleet of older MD500s.

The Fennecs were delivered to Nairobi's Jomo Kenyatta International Airport before being reassembled and delivered to Laikipia Air Base in Nanyuki, where they were formally inducted into KAF service on September 14.

The induction of the Fennec helicopters was attended by the commander of the Kenya Air Force, Major General Francis Ogolla, the country's Cabinet Secretary for Defence, Raychelle Omamo, and the UAE Ambassador to Kenya, Khalid Khalifa Abdullah Rashid Al Mu'alla.



The UAE received 13 AS550B3 Fennec helicopters from Airbus from 2001, and at least 18 armed AS550C3s. These were used by the joint aviation command's 23rd group.

Six AS350B3s were transferred to Jordan around 2005, before the more recent transfer of nine aircraft to Kenya.

The AS550C3 Fennec helicopter, now designated as

the Airbus H125M, can be fitted with emergency flotation gear for operation over water, and can carry a range of armament and sensors, including rocket pods, machine guns or cannon pods, and under-nose electro-optical/infrared (EO/IR) turrets.

In UAE service, the AS550C3 could carry the Turkish Roketsan Cirit laser-guided rocket, but it is not known whether this weapon has been supplied to Kenya.

Kenya has not neglected its fixed-wing aircraft fleet, and reportedly ordered three Leonardo Alenia C-27J Spartan transport aircraft in 2017, for delivery from 2019. These aircraft will replace the KAF's elderly de Havilland Canada DHC-5 Buffalos, about four of which remain in service (of 10 originally delivered). These serve with a transport squadron at Moi Air Base in Mombasa.

Seeker finds a new home

Denel Dynamics is now engaged in fulfilling its latest order for its Seeker unmanned aerial vehicle (UAV) for the United Arab Emirates, writes Alan Dron.

The order, worth R180 million (\$12.3 million) was initially announced at the 2017 Dubai Air show and confirmed earlier this year.

Details have been scarce as to numbers and model of the Seeker family that the UAE has chosen. The Arab nation has the choice of the Seeker 200 (a modernised version of the Seeker II) or the larger, more capable Seeker 400.

A typical Seeker system comprises four to six UAVs, a tactical ground station, a variety of payloads for the aircraft and field support equipment.

□□□□□

The UAE has twice previously ordered small batches of the Seeker II and is known to have deployed them to Afghanistan as part of the international coalition's efforts against the Taliban insurgents. They have also been used over Yemen during the Arab coalition's offensive against Houthi rebels and one was reportedly shot down there in 2015.

The UAV was originally bought by the South African Air Force as long ago as the mid-1980s. The aircraft is no longer in service with the SAAF, but versions are believed still to be in service with the armed forces of Algeria and Saudi Arabia.

The Seeker 200 tactical UAV offers what Denel describes as long endurance (up to 10 hours, or six hours over a target area 250km from base) and a short take-off distance (less than 300m), maximising the number of airstrips from which it can operate.



One option: Denel's more capable Seeker 400.

Other key features include: automatic take-off and landing (ATOL); state-of-the-art avionics and an electro-optical multi-sensor payload combining electro-optical and infrared systems for day and /IR night coverage. It is also equipped with a laser designator and laser rangefinder. Included in its support system it has several enhancements to its ground station, mission control unit and tactical ground station.

In navigating to and from areas of interest, it can fly via a maximum of 16 waypoints and perform several loiter patterns over the target. Its video feed to ground stations is encrypted.

This gives it a range of capabilities, including day and night reconnaissance, target location, artillery fire support and electronic intelligence (ELINT) gathering.

TANZANIA TAKES DELIVERY OF NEW HELICOPTERS

Tanzania is understood to have taken delivery of four Airbus Helicopters Cougar and Super Cougar transport helicopters, writes Jon Lake.

Tanzania reportedly ordered two H215M Cougar and two H225M Super Cougar helicopters in 2017.

One of the latter was spotted during its ferry flight, arriving at Valencia's Manises Airport on the morning of September 6 2018, having flown there from the Airbus plant at Marignane.

The aircraft flew on to Faro, Portugal on September 7, and then to Gran Canaria a day later.

□□□□□

The final destination was Dar-es-Salaam Air Base – an enclave of Julius Nyerere International Airport, where the aircraft joined the Tanzania Air Force Command's helicopter squadron.

The aircraft was delivered wearing a French ferry registration (F-WWOT), with the Tanzanian registration 5H-TAF taped over. It wore Tanzanian national insignia and the legend 'Tanzania Air Force' on the tailboom.

It was painted light grey overall, like the French Armée de l'Air H725 Caracals, but lacked the air-to-air refuelling probe and exhaust suppressors used by these aircraft, although it was fitted with full emergency flotation gear, and may also feature extra-long-range fuel tanks.

Whereas Tanzania has acquired most of its fixed-wing military aircraft from China in recent years, it has



The 11-tonne H225M is the latest member of Airbus' military Super Puma/Cougar family, and has proven its reliability and durability in combat and crisis operations in Lebanon, Afghanistan, Libya, Chad, the Ivory Coast, the Central African Republic, Somalia and Mali.

Right: One of the two H215M Cougar and two H225M Super Cougar helicopters ordered by Tanzania in 2017.



chosen to acquire western helicopter types, turning to Airbus Helicopters to replace its ageing Agusta Bell AB205A-1s and AB412EPs when these were retired in 2015. These were replaced by Airbus Helicopters H155 (EC155B1) Dauphin helicopters.

The 11 metric tonne H225M has a range of 700nm and can carry up to 28 personnel in cabin seats, or up to 14 troops on energy-absorbing wall-mounted seats. The helicopter has two large sliding cargo doors, which allow for rapid deplaning.

For cargo transport missions, the H225M's cabin floor can accommodate a substantial internal load, while up to 4,750kg can be carried on an external load sling.

The H225M is optimised for tactical transport, casualty/medical evacuation, combat search-and-rescue, and special operations missions. It has seen operational use in Lebanon, Afghanistan, Chad, the Ivory Coast, the Central African Republic, Somalia and Mali, and has also supported NATO-led operations in Libya.

RWANDA CLOSES IN ON MEDEVAC CARAVAN

A US Air Force (USAF) notification, issued on September 20, revealed that Rwanda is to receive two new aircraft to be used for medical evacuation and light transport missions during international peacekeeping operations throughout Africa.

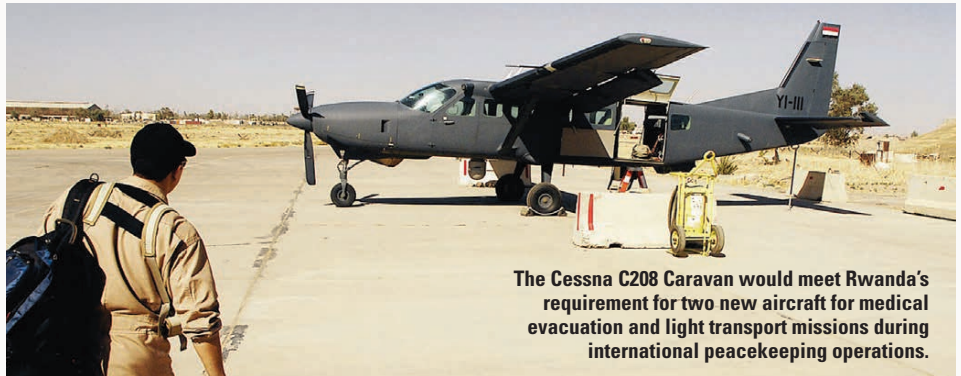
The aircraft will be used especially for United Nations deployments in the Central African Republic, Sudan, and South Sudan.

The notification called for the supply of two single-engine, propeller-driven aircraft that would be suitable for passenger and light cargo transport, carrying a load of 3,500lb (1,588kg) or up to 11 passengers and two crew, and for medical/casualty evacuation and patient transport with two patient-care units.



Performance parameters set out by the USAF include a short take-off and landing (STOL) capability of less than 2,500ft (762m) on a narrow 25-50ft (7.62-15.24m) wide austere strip. A ferry range of 900nm (1,667km) was specified, and a normal range on internal fuel of 450nm (833km), while carrying 11 passengers and two crew.

The aircraft were to be fitted with external hardpoints and were to be 'plumbed' for the carriage of auxiliary fuel tanks.



The Cessna C208 Caravan would meet Rwanda's requirement for two new aircraft for medical evacuation and light transport missions during international peacekeeping operations.

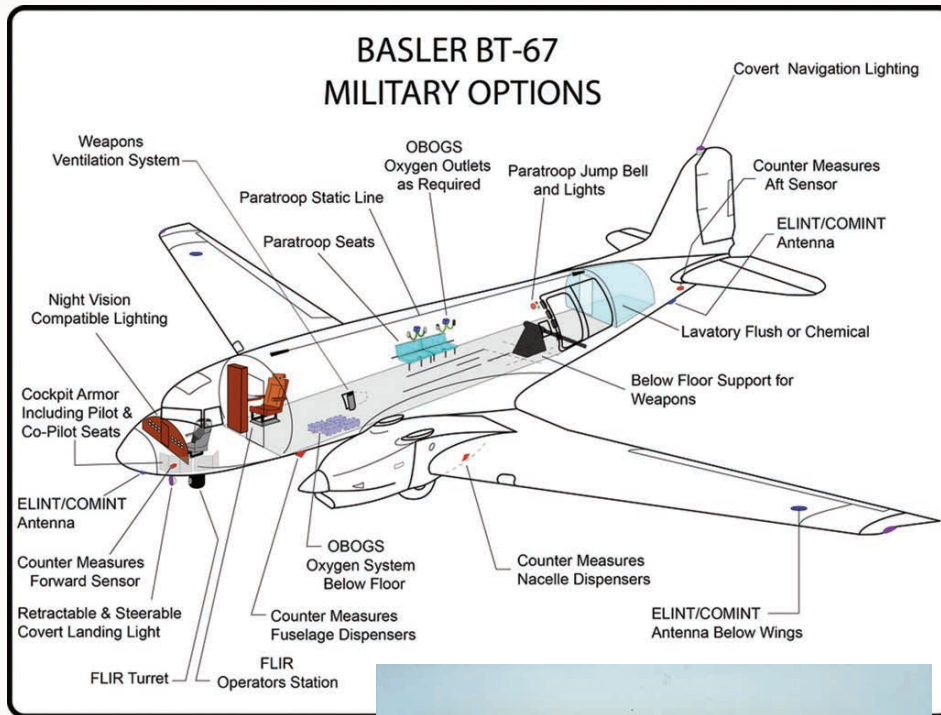
It was laid down that the aircraft should be a new-build, current commercial design with an all-up weight no greater than 12,500lb (5,670kg) with a fixed landing gear and a high-wing configuration to ensure maximum pilot visibility of the ground.

The notification called for both aircraft to be delivered in the livery and paint scheme and of the Rwanda Air Force (Force Aérienne Rwandaise).

The aircraft will be supplied under the US foreign military sales (FMS) programme.

No mention was made of armament or intelligence, surveillance, and reconnaissance (ISR) sensors, so it is assumed that the aircraft will be additional to the 22 AC-208 armed ISR aircraft being acquired by the USAF for allied air arms.

The aircraft are likely to be 'vanilla' Caravans, and not armed AC-208 Combat Caravans or Block 2 AC-208 Eliminators. These variants are modified by Orbital ATK, and carry a range of ISR systems and sensors and a variety of weapons systems.



The Basler BT-67 combines an improved DC-3 airframe with new avionics and turboprop engines. This one serves with the Mali Air Force.

The diagram shows the main features of the BT-67 for military customers.



Mauritania goes for second Basler

It looks like Mauritania is about to receive a second Basler turbo-Dak intelligence, surveillance, and reconnaissance (ISR) aircraft, writes Jon Lake.

A US Air Force (USAF) amended request for information (RFI), issued on August 6, called for the procurement of a Basler DC3-TP67 (BT-67) special mission aircraft, which would be modified for ISR and medical evacuation duties for a Foreign Military Sales (FMS) customer. The aircraft was to be modified to the same enhanced configuration, as an aircraft that had already been delivered.

Since Mauritania is the only operator to use the BT-67 in a specialist ISR role, it is assumed that the new machine will also be delivered to the Force Aérienne Islamique de Mauritanie (Mauritanian Islamic Air Force).

The new BT-67 will probably be delivered to the same unit (the Escadre de Transporte) and will also be based at Base Aérienne Nouakchott, alongside PC-6s and Harbin Y-12s.

The Basler BT-67 is a re-manufactured and highly modified Douglas DC-3 with new Pratt & Whitney Canada PT6A-67R turboprop engines, a lengthened and strengthened fuselage, modified wing leading edges and wingtips, upgraded avionics and a significantly extended airframe life.

Because the BT-67's turboprop engines have a higher fuel consumption than the standard DC-3's Wright R-1820 Cyclone or Pratt & Whitney R-1830-S1C3G Twin Wasp piston engines, range on the standard fuel tank, with 45 minutes reserves, is reduced from 1,160 to 950 nautical miles (2,150 to 1,760km).

A long-range fuel tank can be fitted, however, and this increases the range to 2,140nm (3,960km).

There are currently seven military operators of the BT-67, including two African nations – Mali and Mauritania.

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Cessna is entering a new segment of the aircraft market with its in-development Denali single-engine turboprop. Dave Calderwood takes a first look.



TIME FOR DENALI

Cessna already has the best-selling single-engine turboprop aircraft with its Caravan series. So why is it developing another? One simple answer is speed. The much-loved Caravan is a strong, versatile, load-lugger. But it's not quick. The new Cessna Denali, on the other hand, will be capable of 285kt – not as quick as a jet but much better for covering longer distances than the high-wing draggy airframe Caravan.

Now you don't have to be a plane-spotter to realise that Cessna is targeting the market segment currently occupied by the Pilatus PC-12; the second best-selling single-engine turboprop over the past 10 years.

They are similar size aircraft, with the Denali just edging it with a 5% bigger cabin. They both cruise at similar speeds, both pressurised, both have tough undercarriage for use on unimproved strips, and their service ceilings are similar at around 30,000ft.

But Cessna's advantage is that it's had time to see the market develop, taken feedback from operators, and with a clean sheet design – and a brand-new engine – the US company is sure it can match and beat the PC-12's all-round appeal.

Dan Lyon, Cessna's manager of engineering on the Denali, answered our questions:

Q. What are the specific features of the Denali that will make it attractive in the single-engine turboprop market?

A. The large, stylish and comfortable cabin (6,130ft cabin altitude @ 31,000ft ceiling), low direct operating cost and how easy this aircraft will be to fly are the areas where the Denali really excels.

Q. What are the advantages of the new GE Catalyst engine? The propeller looks pretty special too.

A. The GE catalyst engine brings proven technology to the general aviation turboprop, resulting in increased maintenance intervals, lower fuel burn resulting and lower operating costs. The full-authority digital engine control (FADEC) allows for efficient engine operation without adding workload to the pilot. The McCauley propeller was specifically designed and optimised for the Denali – we wanted a quiet, efficient, durable and lightweight propeller.

Q. Will the Denali be able to cope with unimproved, rough and short strips?

A. Yes, the durable trailing link landing gear has been designed for use on unimproved strips. While we will need the flight-tests to determine the final take-off performance, we are targeting [a take-off] roll of less than 2,900ft at maximum take-off weight, sea level on a standard day.

Continued
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Q. What are the range and performance targets?

A. Max cruise of 285ktas, 1,600nm range with one pilot, four passengers, plus 100nm National Business Aviation Association (NBAA) reserves at high-speed cruise.

Q. How is the Denali being optimised for single-pilot operation?

A. A considerable amount of effort has been put into the cockpit design and layout. Several iterations optimised the cockpit ergonomics and the design team worked hard to reduce switches and circuit breakers. The result is a clean, well laid-out cockpit ideal for single pilot operations. The FADEC-controlled engine, with single lever power/prop control, goes a long way in reducing the pilot workload and making the Denali easy to fly for a single pilot. As far as the Garmin G3000 [for the avionics and flightdeck], it's the ease of use, intuitiveness and features that were major factors in it being selected.

Q. Can the cabin be easily reconfigured for passengers and/or cargo?

A. Yes, the seats, lavatory and dividers have been designed for easy and quick removal. The pilot's operating handbook (POH) will contain weight and ballast information for a wide range of configurations and loadings.

Q. How will the purchase cost and direct operating costs (DOCs) compare?

A. The base aircraft, which is very nicely equipped, is priced at \$4.8 million. Due to the clean sheet modern airframe and systems design, along with advanced engine technology, we expect the DOCs to be significantly lower than existing products.

Q. When will we see a complete flying Denali?

A. First flight is planned for 2019, certification in 2020 with first deliveries soon after.

Q. Who are the likely customers?

A. There has been a lot of interest in both the standard executive and commuter configurations, as well as a quick-change or dedicated medevac aircraft. ■

Cessna Denali key facts

List price \$4.8 million
Engine 1 x GE Catalyst turboprop producing 1240shp
Prop McCauley 105 in diameter, five-blade constant-speed
Range 1,600nm
Cruise speed 285ktas
Take-off 2,900ft
Ceiling 31,000ft
Seats 8-11
Aircraft dimensions H 4.2m x wingspan 16.54m x L 14.86m
Cabin dimensions H 1.47m x W 1.60m x L 5.11m
Full fuel payload 1100lb
Avionics Garmin G3000



Cessna's Denali is going head-to-head with the Pilatus PC-12, even down to having a huge cargo side door.



The Denali can have an eight-seat executive or 11-seat commuter cabin, including luxuries, such as an in-flight lavatory.



The seats and dividers can easily be reconfigured to take part or all cargo.



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A row over how many local people are employed by an international company has seen Equatorial Guinea cancelling contracts with CHC Helicopter. Jon Lake reports.

CHC contracts cancelled over 'local employment' row



The Ministry of Mines and Hydrocarbons of Equatorial Guinea has directed petroleum operators to cancel all contracts with CHC Helicopters, citing a failure to abide by the nation's stringent local content regulations.

The Ministry of Mines and Hydrocarbons of Equatorial Guinea has directed the country's petroleum operators – including Mobil EG Inc (Exxon Mobil) and Noble Energy – to cancel all contracts with Canadian-based CHC Helicopters.

This extraordinary measure was reportedly taken due to CHC's alleged non-compliance with Equatorial Guinea's national content regulations.

In particular, CHC was accused of failing to implement local content laws that were meant to create jobs for locals.

Equatorial Guinea is a member of the Organization of the Petroleum Exporting Countries (OPEC) and is Africa's third-largest oil producer.

It established a 'National Content Regulation of the Hydrocarbons Law' in 2014, which directed that preference would be given to local companies when awarding service contracts, and that agreements with international companies should have local content clauses and should make provision for local capacity-building.

Announcing the move against CHC, Gabriel Mbaga Obiang Lima, the Minister of Mines and Hydrocarbons of Equatorial Guinea, said: "We expect all companies operating in here to follow the laws of the Republic of Equatorial Guinea."

He added that it was: "the responsibility of the Ministry of Mines and Hydrocarbons to ensure strict compliance to our country's laws", while stressing: "We are eager to work with international companies who partner with Equatorial Guinea in the development of our industry."

Oil companies operating in the country were given 60 days to dismantle their contracts with CHC and to find new suppliers. Only those companies that were in compliance with the local content provisions, established in 2014, would be allowed to bid for the new contracts.

CHC was still flying from Malabo in mid-November, using Sikorsky S-76s, but local sources insisted that it would not be working in the country from next year.

The minister explained: "These laws are in place to protect and promote local industry, create jobs for citizens, and promote the sustainable development of our country."

He added that his ministry was: "aggressively monitoring and enforcing the compliance of these requirements".

CHC Helicopter responded that the company had operated in Equatorial Guinea for almost two decades and had built up a comprehensive training programme.

The Sikorsky S-76C+ replaced Bell 212s operating in support of Mobil Equatorial Guinea Inc's offshore installations in March 2004. A company spokesman said that CHC was confident that it was in compliance with Equatorial Guinea's National Content Regulations, and that it welcomed planned further discussions with the relevant authorities.

CHC was created in 1987 through the merger of Sealand Helicopters, Okanagan Helicopters, and Toronto Helicopters, and expanded through an aggressive acquisition programme, acquiring a stake in British International Helicopters in 1993, then buying Norwegian company, Helikopter Services Group, in 1999, and acquiring the Netherlands-based Schreiner Aviation Group in 2004.



By 2014, the company was the world's largest commercial operator of heavy and medium helicopters, servicing the booming oil industry around the world.

The company owned 67 helicopters and leased the remainder of its 238-aircraft fleet.

The collapse in oil prices, combined with a heavy debt burden, forced CHC to file for Chapter 11 bankruptcy protection in May 2016. It was able to secure investment worth \$450 million and reduced its fleet to 137 aircraft, including 32 AW139s, seven Bell 412s, 12 AS332L/L1s, 29 S-76s, 46 S-92s, and 11 other aircraft of various types. The proportion of leased helicopters has been reduced to 55%.

The company currently operates on six continents, serving the oil and gas, search-and-rescue (SAR), emergency medical service, energy and utility sectors. Its three regional divisions include one that covers Europe, the Middle East and Africa (EMEA).

Some 68% of CHC's revenue still comes from the oil and gas sector, with emergency medical services and SAR accounting for another 15%, and the Heli-One maintenance, repair and overhaul (MRO) business providing 17%.

Following the action against CHC, Equatorial Guinea moved to a second phase of action against oil companies that were failing to respond to the ministry's increased focus on local content.

Oil and gas services firms FMC, Schlumberger, and Subsea 7 reportedly faced being banned from working in Equatorial Guinea unless they committed to creating more jobs for citizens by the end of September.

Don't be fooled: It looks like Africa but this is actually Woodbridge Airfield in Suffolk, UK, during the summer of 2018, when drought conditions made it the perfect place for Pilatus to test the PC-24 on a dusty, rough, unimproved runway. Right: The pilots have everything they need with the PC-24's Honeywell Primus-based advanced cockpit environment; The cabin can be configured for passengers, like this double club arrangement, or with a mix of seats and cargo, or all-cargo; the PC-24 has a side cargo door big enough to accept a standard pallet-sized load, just like the PC-12.



PC-24 takes the smooth

Africa's testing terrain and challenging runways make the Pilatus PC-24 a perfect aircraft for the region, according to ExecuJet, which is the first company to operate and manage the aircraft in Africa. Dave Calderwood reports.

The first PC-24 arrived in October and will be based in South Africa at Cape Town International Airport.

ExecuJet will be responsible for its day-to-day management and operations on behalf of the aircraft owner.

The aircraft, developed by Swiss manufacturer Pilatus, has been dubbed the Super Versatile Jet due to its flexibility and ability to operate in and out of very short and unpaved runways. It received European Aviation Safety Agency (EASA) and Federal Aviation Administration (FAA) type certification on December 7 2017.

The PC-24 will also be available for charter and offers clients the latest in in-flight entertainment and connectivity.

With six passengers, departing Cape Town, the aircraft can reach Angola, Zambia, Malawi, and Mozambique. Flying from ExecuJet's fixed-base operation (FBO) at Lanseria International Airport in Johannesburg, passengers can reach DRC, Tanzania, Kenya and Mauritius, according to Pilatus.

The aircraft was on track to add 'rough field' approval to its basic type certification, which will enable it to land on unimproved surfaces. It underwent a series of post-certification tests last

summer, including making its first landing on a dirt strip. In Africa? No, at Woodbridge, Suffolk in the UK, where an abnormally dry summer created the perfect dusty rough dirt strip.

The PC-24 can land on a runway as short as 820 metres (2,690ft) and that includes, grass, gravel or dirt runways. That's 2,477 airports/strips in Africa – the nearest competing aircraft can operate from just 815 African airports, according to Pilatus.

An example is Seronera Airstrip, the main airport for Tanzania's Serengeti National Park. It's a gravel strip, with a good length at 2,280 metres but at an elevation of 1,588m (5,080ft). Such hot and high conditions, which make the air less dense, make huge demands on aircraft



Seronera has a gravel strip.

performance, but the PC-24 is designed to cope.

Pilatus has plenty of experience of such conditions. Its Porter PC-6 and PC-12 single-engine turboprops are masters of difficult, short, dirt strips, and the PC-24 has been designed for the same operations – just a bit faster in the air and with a longer range.

Oscar J Schwenk, chairman of Pilatus, explained how the company has achieved this. "This sort of mission would not be conceivable without the PC-24's rugged landing gear, clever flap systems and special wing design," he said. "The PC-24 was designed with exactly this sort of operation in mind – that's Swiss engineering at its very best."

Africa is lucky to get the PC-24 at this point. Pilatus planned to deliver just 23 aircraft in 2018, and closed the initial order book in 2017. A total of five are on order for Africa, though the other operators have yet to be revealed. Pilatus plans to re-start taking new orders now that it has experience of the aircraft in service.

The Super Versatile Jet tag will come in useful in Africa, as Philip du Preez, general manager of aviation at ExecuJet, reveals.

"The aircraft will be available for all charter operations, from VIP to government and tourist flights," he said.



with the rough

“The aircraft interior lends itself to various layouts through quick change options. For example, if all eight seats are not required, two can be removed through the large cargo door at the back (as seen on the PC-12 turboprop), expanding the cargo area.

“The aircraft certainly emphasises versatility and we will take the lead from our clients when it comes to servicing their needs.”

Nothing is being left to chance with the introduction of the PC-24, according to du Preez.

“ExecuJet is working closely with Pilatus Centre at Rand Airport, Germiston, the local

factory representative, to ensure a seamless entry into service,” said du Preez. He explained that ExecuJet’s pilots were completing their type training at FlightSafety in Dallas, USA.

Gavin Kiggen, ExecuJet’s vice president in Africa, said: “Africa is the perfect environment for the PC-24, with its testing terrain and challenging runways, and we are honoured to be the first business aviation operator to manage the aircraft in the region.

“ExecuJet’s worldwide commitment to service excellence makes us industry-leading in our field, which is testament to all the hard work and dedication exhibited by our staff and partners.” ■

SOMMAIRE

EXECUJET OPÈRE LE PREMIER PILATUS PC-24 EN AFRIQUE

Le premier PC-24 a été livré en octobre et sera basé en Afrique du Sud.

ExecuJet sera responsable de sa gestion quotidienne et de ses opérations pour le compte de son propriétaire.

L’avion, développé par le constructeur suisse Pilatus, a été surnommé le Super Versatile Jet en raison de sa flexibilité et de sa capacité à opérer sur des pistes très courtes et non pavées. Le PC-24 a été certifié par l’EASA et la FAA. Il pourra faire des vols charter et offrira à ses clients les dernières avancées en matière de divertissement et de connectivité en vol.

Il a effectué une série de tests l’été dernier et peut atterrir sur toutes sortes de piste et même celles mesurant 820 mètres de long. Selon Pilatus,

l’avion peut opérer à partir de 2477 bandes d’aéroport en Afrique contre 815 pour son plus proche concurrent.

Pilatus prévoyait de livrer seulement 23 appareils en 2018 et compte prendre de nouvelles commandes comme elle a acquis de l’expérience. Il y a cinq commandes pour l’Afrique.

L’avion sera disponible pour toutes les opérations d’affrètement, des vols VIP aux vols gouvernementaux et pour les touristes. L’intérieur de l’avion polyvalent se prête à différentes configurations grâce à des options de modifications rapides.

Selon ExecuJet, la compagnie est un leader dans ce segment grâce à son engagement pour l’excellence au niveau mondial.

BRENT AIMS TO EXPAND VVIP OPS

Brent Aviation, a VIP charter operator based at Nairobi’s Wilson Airport, is expanding its local VVIP services, writes *Jon Lake*.

In the last nine months, the company is proud to have handled 13 VVIPs and the number is set to rise, according to chief operating officer, Captain Raphael Sebastian, who calls the market outlook “promising”.

Brent Aviation is set to launch a range of new local services for its east African clientele, aiming to provide something for those “who probably need a weekend away from the hustle and bustle of the city and want to explore the country”.

The company is offering to fly four passengers to the coast on a Gulfstream business private jet at a cost of Sh1.36 million (\$13,280) for the round trip, with two nights in a five-star hotel (inclusive of dinner and breakfast) and limousine transfers to and from the passengers’ home and the hotel.

□□□□□

The charter operator, established six years ago, is also considering introducing helicopter services to beat the traffic jams frequently experienced on Kenyan roads.

It currently provides a full array of charter services with fully customised itineraries, and also handles airport clearances for its clients.

“We not only handle people’s flight logistics but we also take care of accommodation and transport to and from the airport and we can also provide a professional personal assistant to those on business trips,” Sebastian said. “Our aircraft and crew are dedicated to serving client needs and will have them on their way, on time and in style.”

Brent Aviation currently has three aircraft, including a Beechcraft King Air 90 (5Y-CEF), which carries five passengers, a Gulfstream G280 business jet carrying nine passengers, and a Boeing 737-400F freighter.

It does not confine its local flights to the Kenyan coast, but also covers all other destinations across the country.

“Kenya is a beautiful country with beautiful scenery that is worth exploring in the utmost comfort,” Sebastian insisted.

One challenge faced by Kenyan operators is the fluctuating price of fuel, which sometimes makes it hard to maintain competitive pricing.



This luxuriously appointed Beechcraft King Air 90 is augmented by a Gulfstream G280 business jet in the Brent Aviation fleet.



French helicopter company, Héli-Union, has announced a new partnership with Angolan business jet charter operator and service and maintenance provider, Bestfly, writes *Jon Lake*.

The collaboration, revealed in late September, aims to provide what Héli-Union calls “top-notch helicopter services for oil-and-gas companies in Angola”.

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It also marked the partners’ determination to jointly contribute to Angola’s industrial development.

With 57 years of experience in more than 60 countries worldwide, Héli-Union today operates a fleet of more than 40 aircraft located in nine countries. The company has operated offshore and onshore point-to-point personnel transportation services for oil and gas companies, medevac flights, limited search and rescue (SAR) operations, and has provided

Partnership targets offshore market

helicopter pilot training and helicopter maintenance, repair and modification services, to a range of civil and government clients worldwide.

After 20 years of operating autonomously in Angola, Héli-Union decided to consolidate its market position by partnering with a local Angolan aviation provider.

Bestfly was established in 2009 and has rapidly become known for the quality of the aircraft management, handling, operational and flight planning support services that it offers.

The partnership was announced at an event at Bestfly’s premises at Luanda Airport, to which a number of local government departments and oil and gas companies were invited.

Nuno Pereira, Bestfly’s chairman, said he was:

“very excited to collaborate with a world-known aviation actor like Héli-Union”. He added: “With Héli-Union’s in-depth proficiency in the helicopter industry and our domestic know-how of the Angolan market, we will certainly be able to exceed the expectation of the international oil and gas operators in Angola.”

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Jonathan Cosson, deputy managing director of Héli-Union, said he was proud of this new partnership. “With Bestfly’s local knowledge and experience, Héli-Union will be able to reinforce its presence in Africa, especially in an emerging oil-and-gas market like Angola. Together, we will thrive on being the best aviation service provider in Angola.”

Héli-Union and Bestfly will deliver several helicopters to meet the operational needs of the oil and gas industry in Angola and were expecting to start operations as *African Aerospace* was going to press. ■

ANGOLA RESTRUCTURES STATE OIL COMPANY AIR DIVISION

Angola’s state oil company, Sonangol (Sociedade Nacional de Combustíveis de Angola – the National Fuel Society of Angola), has signed an agreement with a consortium formed by Canada’s CHC and Morocco’s Heliconia to restructure its aviation subsidiary, SonAir.

Sonangol is the exclusive licensee for oil and gas exploration and exploitation in Angola and offshore on its continental shelf, but invested in diverse areas of the Angolan economy during the oil boom.

The company is now looking to move away from these non-core activities, which range from banking to real estate, to focus on oil and gas – including exploration, research, development, marketing, production, storage, and the transport and refining of hydrocarbons.

□□□□□

The regeneration of SonAir represents a microcosm of the restructuring of the parent company – with a renewed focus on the core business of supporting oil and gas.

High costs had an impact on the viability of SonAir’s operations, and fixed-wing services were scaled back. In 2018, the airline ceased operating the thrice-weekly services that had been flown between Luanda and Houston using two Boeing 747-400s operated by Atlas Air.

SonAir’s rotary-wing operations were severely



Back to basics: SonAir begins its restructuring.

disrupted following a fatal accident in the North Sea in 2016, after which the commercial Airbus Helicopters Super Puma fleet was grounded for an extended period. The accident happened when a Super Puma, operated by CHC, suffered a catastrophic main rotor separation while operating from the Norwegian Statoil Gullfaks B oil platform.

With eight AS332 and 16 H225 Super Pumas forming the backbone of its fleet, SonAir was left with just five smaller Eurocopter Dauphin AS 365N3s and nine Sikorsky S-76C+ and S-76C++ helicopters operational,

forcing oil companies to rely on boats to transport personnel to and from offshore rigs.

In its agreement with CHC and Heliconia, Sonangol required its new partners to conduct an internal audit and evaluation of SonAir’s structure and services and then to find a transport solution for Angolan oil operators who had previously used SonAir’s helicopters to fly personnel to offshore platforms.

It was anticipated that this would lead to the formation of a consortium of CHC, Heliconia and SonAir that would re-launch operations by Sonangol’s air carrier. ■

SEYCHELLES EMBRACES DRONES FOR FISHERY PROTECTION

The Seychelles Fishing Authority has unleashed an unprecedented combination of short-range drones, autonomous long-range unmanned air vehicles (UAVs), Earth observation data and fisheries intelligence analysis in its fight against illegal fishing operations in its waters.

The Seychelles archipelago consists of 115 granite and coral islands spread over an area of 177 square miles. Fishing is the country's largest economic sector after tourism, with fish products accounting for 95% of total exports and employing 17% of the population.

Licensing fees paid by foreign companies that trawl in Seychelles' territorial waters are a crucial source of income.



However, the Seychelles' fishing industry has been hard hit by the effects of Somali pirates, with the number of fishing boats entering Port Victoria, Mahe, dropping to 60 per year during the peak piracy threat period from the usual 60 per month.

The pirates were estimated to be costing 4% of the Seychelles' GDP, including the loss of boats, fishing, and tourism, and the need to invest in maritime security.

The industry is now starting to recover as a result of international anti-piracy efforts, and by fishing boats carrying armed guards to deter attacks by pirates.



Unmanned drones are being evaluated under the Seychelles Fishing Authority's FishGuard trial.

India donated Dornier Do 228 patrol aircraft in January 2013 and June 2018, while gunboats and patrol vessels have been donated by China, the UAE and India.

However, piracy and illegal fishing is still a threat so the Seychelles Fishing Authority has now launched a new trial, known as the FishGuard project, which will use drones to monitor illegal fishing activities.

The drone will be operated by the Seychelles Air Force, while the coastguard will provide a vessel for at-sea UAV deployment.

The Seychelles Civil Aviation Authority will provide

the necessary flight authorisations and will ensure that safety requirements are met.

Long- and short-range drones will be provided by ATLAN Space. The company has developed patented technology that will use networks of aerial vehicles guided by artificial intelligence to scan large marine areas.

GRID-Arendal will provide relevant Earth observation data for the pilot project, while Norway's Trygg Mat Tracking will provide fisheries intelligence and analysis.

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



Kenya Airways is seeking to emerge from a period of austerity and start to expand again. But, as Alan Dron reports, one part of the plan designed to bolster its financial strength has hit delays.

Kenya merger plan is still up in the air



JKIA is the busiest airport in east Africa, handling some 40 passenger and 25 cargo airlines.

Plans for Kenya Airways to merge with Kenya Airports Authority (KAA) have apparently stalled after the initial proposal from the government failed to bring about a workable solution between the two organisations.

Under the plan mooted in June 2018, the merger of the two companies would see the national carrier take over the running of the capital's Jomo Kenyatta International Airport (JKIA) and paying concession fees to KAA.

This would echo the arrangement in Ethiopia, where Ethiopian Airlines, one of Kenya Airways' main rivals on the continent, and Addis Ababa Bole International Airport are run under the same holding company.



"All our competitors are state-owned, state-controlled, state subsidised and managed for the benefit of the airline. We are the odd one out," KAA chairman, Michael Joseph, said when the plan was announced.

Under the proposed public-private partnership (PPP) arrangement, the airport would be owned and managed by a holding company that would be 100% owned by Kenya Airways under a 30-year concession scheme. Kenya Airways proposed to pay the airport authority concession fees and to run other profitable services at the airport including catering, fuel distribution and ground services.

According to KAA, the airport is the busiest in east

Africa, handling some 40 passenger and 25 cargo airlines. It has a single, 4,200-metre runway. A second, 4,800-metre runway was due to be built but construction was postponed earlier this year after the government decided to look more closely at the project's value for money.

The airport handled 7.6 million passengers in 2017, up slightly over 2016. Numbers are expected to rise following the launch of Kenya Airways' flights to New York.

Proposals to improve facilities at the airport would allow it to handle some 11 million passengers annually by 2022.

"We are building JKIA to have global reach and make the airport an aviation hub. Plans are in place to remodel terminals 1B, C and D to increase our capacity from seven to 10 million passengers a year," KAA's managing director, Jonny Andersen, said in November.

Further improvements were on the way, he added: "We are working closely with the immigration department on an initiative that seeks to improve immigration processes at our airports. We are also in the process of replacing our signage at JKIA so as to improve the airport passenger experience."



A sign of the improving reputation of JKIA came in November when it received an award for the most improved airport in Africa in a ceremony held on the sidelines of the Customer Excellence Summit 2018 in Halifax, Canada.

Kenya Airways' control of the airport would help improve its financial position; it has lost money heavily in recent years as it struggled to fight off competition from foreign airlines, notably from the Middle East, such as Emirates and Qatar Airways. It has sold off or leased out several of its aircraft to improve its finances and has also unwound unfavourable fuel hedging positions.

However, the sub-leased Boeing 777-300s and 787-8s, which were farmed out to Turkish Airlines and Oman Air respectively, will be rejoining Kenya Airways' fleet over the next year. The airline is also considering expansion again with the possible acquisition of up to 10 Boeing 737 MAXs.

It made a net loss of around 10 billion Kenyan shillings (\$97 million) in 2016-17, although this was a considerable improvement on 2015-16's loss of 26 billion Kenyan shillings. This improving trend continued in the first half of 2018.

The Kenyan Government felt that a merged airline/airport operation would improve Kenya Airways' financial position.

However, in September, Andersen said that discussions on the merger had so far failed to produce any firm decisions and that no developments were expected in the short term.

Kenya Airways declined to comment "as the PPP project is still in discussions".

LA PISTE DE L'AÉROPORT DE GAO AU MALI REFAITE

Ce projet facilitera l'acheminement des médicaments et des vivres dans la région enclavée de même que les opérations nocturnes de la MINUSMA pour le maintien de la paix. **Vincent Chappard**

Selon la MINUSMA, cette piste d'atterrissage permettra désormais à des avions gros porteurs de se poser dans le nord du Mali, à Gao et facilitera les opérations nocturnes essentielles pour des évacuations médicales.

Ce projet de 14,4 milliards de FCFA (environ 7,6 millions d'euros) a été financé par la MINUSMA et l'Allemagne. Les travaux ont porté sur le renforcement de la piste existante en béton bitumé, les prolongements d'arrêt, l'élargissement de la bretelle civile avec deux accotements, la consolidation de deux bretelles militaires et de l'aire de stationnement militaire et civile de même que des ouvrages de drainage et d'assainissement.

Le Chef de la MINUSMA, Mahamat Annadif Saleh souligne que « l'utilisation durable de cette piste est essentielle pour le déploiement des troupes et l'acheminement d'équipements de la MINUSMA » au nord du pays. Tout le pays bénéficiera à long terme de ce projet de maintien de la paix et de la sécurité dans la région comme



La nouvelle piste de l'aéroport international de Gao.

l'a également affirmé le chargé des affaires à l'ambassade d'Allemagne, Simon Herchen.

Selon le ministre des Transports et du désenclavement, Moulaye Ahmed Boubacar, ces investissements consentis par les partenaires du Mali intègrent la politique nationale de reprise des activités dans le pays.

Le retour des vols commerciaux sur Gao contribuera non seulement à désenclaver les régions du nord du Mali mais aussi à redresser l'économie nationale. ■

SUMMARY

MALI'S GAO AIRPORT RUNWAY REPAIRED

Recent refurbishment of Mali's Gao Airport will allow large aircraft to land in the north of the country and enable the night-time operations essential for medical evacuations and the delivery of medicines and food to the landlocked area.

Financed by the United Nations Multidimensional Integrated Stabilisation Mission in Mali (MINUSMA) and Germany, the project focused on strengthening the existing asphalt and concrete runway; creating runway-end stopping extensions; widening the civilian ramp; consolidating two military ramps; refurbishing the military and civilian parking areas; and undertaking drainage and sanitation works.

According to German embassy spokesman, Simon Herchen, the entire country will benefit thanks to enhanced peace and security in the region.

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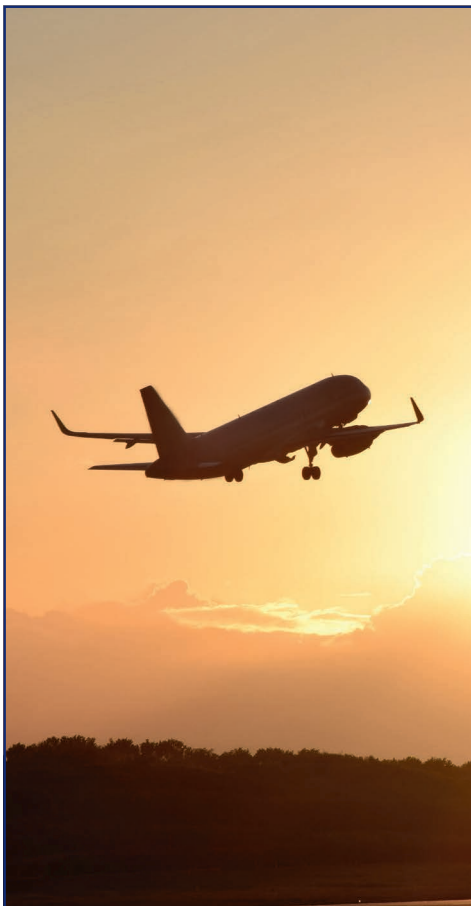
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A new international airport is about to emerge in western Uganda, as the country seeks to unlock its oil wealth.

Alan Dron
reports.



The initial site clearance work has been carried out at Hoima, which is located in what were previously royal hunting grounds.

Uganda's new airport rising from the bush

The vegetation has been cleared and a huge swathe of reddish soil exposed near Hoima, in Kabaale District, as construction of Uganda's second international airport gets under way.

By 2020, the first aircraft are due to be landing on a new runway, as the airport, designed to support the nation's nascent oil and gas industry, takes shape.

The airport has come about because the oil industry is concerned that the local road network is inadequate to support the heavy traffic required, both to exploit nearby oil reserves and to build the new refinery that will be constructed close to the airport.

The airport is some four hours by road from the capital, Kampala. Until now, Kampala's Entebbe Airport has been the country's sole international aviation gateway.

When complete, Hoima will boast a single 3.5km x 75m runway, as well as 4km of access roads. A terminal building with a floor plan measuring 36m x 90m will have both cargo and passenger facilities, together with associated offices, under one roof.

In early 2018, contractors COLAS UK and joint venture partner, Solel Boneh International Holdings, the international arm of Israeli company, Shikun & Binui, started to clear bush, create access roads for construction traffic and fence off the 29sqkm site.

The runway and airport have been designed with the ability to accommodate the world's largest cargo aircraft, including Boeing 747-8Fs and Antonov An-124s, which will be used to ferry in the outsize equipment needed for the construction of the refinery and associated oil industry infrastructure.

Indeed, under a tight deadline for such a large project, the freighters will be landing on the new runway in 2020, around a year before the terminal is scheduled for completion, to allow work on the oil project to proceed as quickly as possible.

Looking ahead, however, Hoima will also be a passenger airport and, in the longer term, will support tourism; several world heritage national parks are in the area. The airport will be owned by the Civil Aviation Authority of Uganda.

The airport development is backed by the Ugandan Government, which agreed terms for construction funding with the United Kingdom; the UK's export finance arm is providing more than \$300 million towards the project, the largest loan ever provided by the UK to a sub-Saharan African nation.

The new infrastructure is expected to give a significant boost to the Ugandan economy, which is currently reliant on fuel arriving by the costly overland route from Kenya – much of it from Mombasa, 1,000km away.

By late last year 650 people were already on site. Under an informal agreement with the local Ugandan authorities, members of local communities have priority access to work and around 30% come from the region, while 70% are from elsewhere in Uganda. In addition, there is a small number of expatriates.



The immense scale of Hoima has demanded careful logistical planning but the schedule of work is progressing rapidly. By November 2018, the whole length of the runway and the access roads were already under construction, said COLAS UK.

Close to 1cukm of gravel had already been moved, and used to build the runway embankment. This is just the start – a further 6cukm of gravel will be moved before the project is complete.

Work on the runway should be substantially complete by mid-2020. Some 13,000 tonnes of bitumen will have to be imported to complete the surfaces but much of the other material can be locally sourced.

"There is still much to be done before the final runway surface can be laid," said a COLAS UK spokesman. "It is challenging terrain. Some areas must be built up by 25 metres, while elsewhere the site needs to be cut down by 12 metres. Around the edges of the site, dense bush, forest, wetlands and rivers must be protected."

Extensive engineering studies have been conducted to avoid or minimise environmental impact.

The new infrastructure is expected to give a significant boost to the Ugandan economy.

A South African flight school has gone global in its reach and is now training cadet pilots from all over the world. Dave Calderwood reports.

GOING GLOBAL: THE AIR SCHOOL THAT'S AIMING HIGH



Former fighter pilot, Attie Niemann, is now CEO of 43 Air School, headquartered at Port Alfred.

With bases at Port Alfred, Port Elizabeth and East London airports, 43 Air School is aiming to train up to 300 pilots a year, who will all graduate with a South African air transport pilot's licence (ATPL).

Attie Niemann, chief executive of 43 Air School and a former fighter pilot with the South African Air Force, said: "We have students from more than 40 countries and four continents training with us. We specialise in airline training and, if you go to our Facebook page, for instance, we have more than 300,000 followers from all countries and continents.

"We train students from Asia, Europe, South America, Africa and Australia and we have exclusive contracts with overseas airlines to train their airline cadets."

The school owes its name – 43 Air School – to a World War 2 operation started in 1940 to train bomber pilots and observers. It closed in 1946 when the war ended. The name was resuscitated in 1989 when a civilian flying school was opened in some renovated buildings left over from the original 43.

The operation stepped up a gear in 2002 when it was acquired by NAC. Then, in 2012, it made the transition to offering airline pilot training, recognising the growing demand for pilots. "We are the only approved training organisation (ATO) in Africa that offers the integrated ATPL course. Because of the stringent requirements to get approval from the South African Civil Aviation Authority, we are still, after five years of offering it, the only school that has this ability," said Niemann.

"In addition, we also offer students the further training to get them ready for employment with our A320 and 737NG, which means we can have a student airline-ready in two years – no other ATO can offer this."

This last statement refers to 43's new airline pilot standards multi-crew cooperation (APS MCC) course, which is an enhanced MCC course introduced by the European Aviation Safety Agency (EASA) to "sharpen up" cadet pilots and get them ready for taking a type rating, usually on an Airbus A320 or Boeing 737.

Niemann admits that 43's ambitions include offering an EASA ATPL course sometime in the future.

That move would take them head-to-head with some of the premier flight training schools, such as CAE and L3 Airline Academy.

However, Niemann is clear about 43's commercial advantage. "It's value for money and quality we deliver," he said. "I believe we compete well with CAE and other premier European ATOs."

Of course, one of the biggest problems affecting would-be airline pilots is finding the finance to pay for the training – upwards of £100,000 for an integrated ATPL with some of the European-based ATOs.

Like those ATOs, 43 doesn't offer finance itself. However, 70% of the airlines sending students to the school are sponsoring them. For the rest, it's a question of finding the cash or, in a rare case like Regomoditswe Isis Swarhle (see box), attracting a scholarship.

There's no standing still in the dynamic pilot training market and 43 has introduced a digital learning process for the theoretical knowledge side of the ATPL. It also has training aircraft with electronic flight displays, rather than the old 'steam' mechanical gauges, a full-time safety officer, 70-plus instructors, 240 full-time staff and modern campuses with full facilities. This is a big business! ■



Regomoditswe Isis Swarhle: Dream job.

THE DREAM CAN COME TRUE

Pretoria-born pilot, Regomoditswe Isis Swarhle, developed a fascination for aviation at 13, while playing Microsoft Flight Simulator.

However, her first real taste didn't happen until a few years later, when her mother paid for an hour's flight at Johannesburg School of Flying.

Lack of funds threatened any idea of a pilot career until, in May 2013, she was fortunate enough to be granted a full sponsorship by

ExecuJet Aviation to complete an ATPL, which she took at 43 Air School.

In just 15 months she graduated. She then returned to ExecuJet Aviation and worked as a flight coordinator and as a ground hostess for two years.

She got her first flying job in December 2016 as a first officer flying a Pilatus PC-12 at Fireblade Aviation.



Victoria Moores and Alan Peaford report from the 50th annual general assembly of the African Airlines Association (AFRAA) in Rabat, Morocco.

WORKING TOGETHER: THE WAY AHEAD FOR AFRICA

Abdérahmane Berthe, AFRAA secretary general, was celebrating his first anniversary since taking the top job in the 40-airline strong association as he opened the 50th annual meeting.

The challenges are no easier today than they were when AFRAA was created, with a goal to drive commercial and technical cooperation among African airlines.

Great strides have been made, he said. "Africa represents the last frontier for aviation development and this is a great reminder of the enormous value that member airlines have created by working together," he told a packed assembly hall in Rabat.

"I am convinced that cooperation and strategic partnerships are the pillars for our success and will continue to boost shared value for the benefit of all our people."

Berthe, and the AFRAA chairman, Royal Air Maroc CEO Abdelhamid Addou, warned that despite the successes there were still hurdles ahead.

Top of the successes was safety. Africa has now enjoyed two consecutive years with zero fatal accidents or hull losses.

But key issues of concern to the industry's development included implementation of the single African air transport market (SAATM) as well as disruptive innovation, security and infrastructure.

SAATM remained top of the list. "The African air transport sector is on the cusp of a great revolution, which will undoubtedly signal an important turning point in the history of air transport in our continent," Berthe said.

"We hope that the political will currently expressed for the establishment of SAATM will allow us to fulfil our common

destiny, to see all African states remove protectionist barriers, leading to air traffic growth on our continent, carried mainly by African companies, in the interest of the economies of our countries and our fellow citizens."

Airline CEOs were not so sure success would come as quickly as predicted. Infrastructure remains an issue with only 27% of the 195 international airports in Africa certified, according to International Civil Aviation Organization (ICAO) requirements.

Kenya Airways CEO, Sebastian Micosz, argued that Africa needs to find its own model and not rush headlong into copying a European system which, he said, took 100 years and very severe control measures to create a united market.

"We need to first ensure our markets are mature before we go into a united one or else we might find ourselves in a situation of collapsing airlines at a time that countries are literally outdoing each other in creating their own carriers," he said, citing Kenya's neighbours, Uganda and Tanzania, as examples.

"Our aviation numbers are still too small for a viable united market on a continent where only 3% of global aviation traffic – 100 million passengers – fly yearly out of a 1.3 billion population,"

As well as Micosz and Addou, the airline CEOs panel included Ernest Dikoum, Camair; Tewolde Gebremariam, Ethiopian; Rui Carreira, TAAG Angola; Sanjeev Gadhia, Astral Air; and Desire Balazire Baatu, Congo Airways.

The issue of many African countries seeing a national carrier as a symbol of independent national identity rather than as a commercial business that could generate growth for national economies was recognised by the panel.

Partnerships can help Turkish achieve

Turkish Airlines is planning to expand its already significant African presence through new routes and partnerships, with the ultimate aim of serving every country on the continent. Victoria Moores reports.

Turkish Airlines' ambition has just come a little bit closer, with the addition of flights to Banjul (Gambia) in November 2018 and Lusaka (Zambia) in December 2018. Both countries invited the airline to launch services.

Beyond these two, Turkish is hoping to start flights to Port Sudan (Sudan) this year, as well as strengthening frequencies on existing routes.

"We fly to Africa more than any other airline. We serve 53 destinations in 35 African countries," Turkish Airlines deputy chairman & CEO, Bilal Eski, said on the sidelines of the African Airlines Association (AFRAA) general assembly in Rabat, Morocco.

Including codeshares and interlines, this network reach expands by another 18 destinations and eight countries. "We are not finished. Our main objective is to fly to each country in Africa," he said.

"For one or two countries, the bilaterals are not there, so we would look to the governments to make an agreement. Also, for some, the demand is not strong enough. For example, for Angola, there is no bilateral. For others, we have rights, but it depends on capacity and feasibility."

Turkish Airlines already has six African codeshare partners – Air Algerie, Air Namibia,

EgyptAir, Ethiopian Airlines, Royal Air Maroc and RwandAir – as well as interline agreements with Air Mauritius, Air Seychelles, Comair, Kenya Airways, LAM Mozambique, Mauritania Airlines, South African Airways (SAA) and Tunisair.

"Our strategy is not to grow alone," Eski said, adding that he sees scope for further codeshares, joint ventures and partnerships. "We are ready to make any type of cooperation that would be of benefit to the two partners."

One natural cooperation could be a closer relationship with fellow Star Alliance member Ethiopian Airlines. "We met with Ethiopian yesterday [Nov 26, 2018] and we have set up to meet again in the following months," Eski said.

Turkish Airlines is interested in extending its codeshare with Ethiopian Airlines and has invited the Addis Ababa-based carrier to come



Abdérahmane Berthe:
"Africa represents the last frontier
for aviation development."



Alexandre de Juniac: "Too
many African governments
view aviation as a luxury
rather than a necessity."

GOVERNMENTS MUST NOT GET IN THE WAY – IATA BOSS

In a keynote address, Alexandre de Juniac, the CEO and director general of the International Air Transport Association (IATA) warned that governments were getting in the way of progress.

"Africa is an expensive place for airlines to do business," he said. "There is no shortage of examples illustrating the heavy burden that governments extract from aviation. Jet fuel costs are 35% higher than the rest of the world. User charges, as a percentage of airlines' operating costs, are double the industry average. And taxes and charges are among the highest in the world."

"On top of that, \$670 million of airline funds are blocked. Too many African governments view aviation as a luxury rather than a necessity. We must change that perception."

Already African aviation supports \$55.8

billion of economic activity and 6.2 million jobs in the continent, de Juniac told the assembly, but it could be so much more.

The IATA chief also warned the governments about failures in the development of infrastructure. "In Africa we have infrastructure problems in two extremes. In some cases, it is overbuilt and expensive. In other cases, it is deficient and cannot meet demand."

He called on the governments to involve the air transport industry in the decision-making process. "Dialogue between industry and government is critical to ensure there is sufficient capacity to meet demand, that airline technical and commercial quality standards are met and that the infrastructure is affordable. Achieving that will create the platform on which aviation's economic and social benefits can be maximised," he said.

its African ambition...

and see the Istanbul New Airport, which will ultimately have a 200 million-passenger capacity.

The wider offer of airline partnerships goes beyond airline operations. Turkish Airlines is also looking to partner with African carriers on maintenance and technical services.

At the moment, Turkish Airlines has a huge technical presence in Istanbul, but has no plans to establish its own maintenance facilities in Africa. However, Eski is open to Africa's potential: "Everything can change, depending on feasibility," he said.

While Turkish is keen to grow in Africa, Eski sees this taking the form of organic growth or route-based partnerships, rather than the airline setting up its own equity joint ventures on the continent. This is because the traffic volumes are often too thin to justify the creation of a dedicated start-up airline. "We

get this type of [start-up joint-venture] enquiry from many countries, but we prefer to work with a cooperation to bring business and tourism to countries. Establishing an airline is easy. The most problematic part is sustainability."

Turkish is also upgrading its aircraft on African routes, switching from narrow-body to wide-body operations where it can, although this depends on demand and aircraft availability.

The Istanbul-based carrier typically operates Boeing 777s and A330s to destinations in southern Africa and 737-900s or MAXs to countries in north and central Africa.

Between 2007 and 2017, Turkish Airlines has grown by 13.1% per year, expanding to serve 307 destinations in 122 countries using its fleet of 328 aircraft.



Bilal Eski: "Our main objective is to fly to each country in Africa."

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Inmarsat believes that in-flight connectivity could be worth \$587 million to airlines in the region by 2035.

It cites Africa's rising interest in mobile telecommunications, with the *Financial Times* likening the mobile phone's influence on sub-Saharan Africa to that of the steam train on 19th century Europe, the workhorse that drove social and economic transformation.

Inmarsat says passengers will want to continue their mobile experience while on flights in the region.

The telecommunications giant is keen to promote the economic possibilities that might be opened up by airlines installing its GX Aviation satellite-based in-flight connectivity solution, which, it says, can give passengers an "at home" internet experience, even at 35,000 feet.



High-quality Wi-Fi can also provide airlines with new ancillary revenue streams from Wi-Fi access payment, in-flight e-commerce, digital advertising sales and premium-priced, streamed in-flight entertainment.

According to Sky High Economics, a study of the commercial impact of in-flight connectivity by the London School of Economics and Political Science, showed broadband-enabled ancillary revenues in Africa would grow from just over \$10 million in 2018 to more than \$506 million by 2028.

Inmarsat's in-flight connectivity survey, 2018, found two-thirds of those who felt that Wi-Fi was fundamental to daily life believed in-flight Wi-Fi was a necessity.

Increased mobile penetration also brought higher levels of device ownership; meaning passengers had their own tech on board and increasingly expected to be able to use it.

The company says its believes air travel has the potential to accelerate economic

In-flight connectivity in Africa worth mega-millions

Inmarsat unveiled its White Paper 'In-flight connectivity – a new opportunity for African aviation' at the African Airlines Association (AFRAA) annual general assembly in November. Steve Nichols reports.

growth and development in Africa, connecting markets both within and outside the continent, and opening up new ones, while also fostering further investment and innovation – including tourism – throughout the continent.

Ben Griffin, Inmarsat Aviation vice president MEA and APAC, said: "Inmarsat and our partners have made significant investments in Africa and we are committed to helping shape a more connected and digital continent.

"As the only operator of a fully owned and managed global network providing high-speed broadband to both cabin and cockpit, Inmarsat and partners are working with the airlines in the African continent to help them realise their potential through connectivity.

"Our value-added partners all have a presence in Africa and can offer equipment, installation, tailored service plans, and custom applications to help airlines manage, optimise and benefit from their investments.

"Armed with this white paper and a renewed focus, the Inmarsat Aviation team is pro-actively taking our in-flight connectivity story to the market.

"We are also a member of the Smart Africa Alliance, so we are already very well established in key initiatives in our other businesses."

Inmarsat says it isn't just commercial aviation that could benefit from the

uptake of in-flight connectivity. For business aviation passengers, the ability to stay connected means they can maximise their productivity while in the air.

African Business Magazine reported that Nigeria is the fastest-growing private jet market in the world after China. And, according to figures compiled by Corporate Jet Investor, South Africa is 11th in the world in terms of jet registries, ahead of countries such as Australia, France and Switzerland.



Jet ConneX, Inmarsat's satellite-based solution for Africa's increasing number of business and private jet operators, provides in-flight connectivity right across the continent.

"The beauty of Inmarsat's Jet ConneX is the true global nature of the coverage, which makes it an ideal choice for the business sector within Africa and beyond," said Griffin

"With Africa's growing economies and challenges facing commercial routes, smaller, privately owned aircraft have a bigger part to play. Many of our competitors with Ku-band don't have the luxury of being able to deploy meaningful coverage over Africa, so the performance simply isn't there to supply smaller, privately owned aircraft or meet the high demands of VVIP and heads-of-state." ■



The Inmarsat Aviation team is pro-actively taking our in-flight connectivity story to the market.
BEN GRIFFIN



Taking centre stage at the Rafale International stand was a large model of an Egyptian Air Force dual-seat Rafale DM. The Egyptian Air Force is in the midst of receiving 24 Rafales. Picture: Alan Warnes.

EDEX DEBUT PROVES TO BE THE PERFECT MODEL

If there were ever doubts about whether this first exhibition would be a success, they were quickly dispelled. There were around 350 companies showing off their wares, from all over the globe.

The three large halls covered air, sea and land topics, with much of Hall 3 dedicated to the Egyptian MoD.

There were trucks, ships and the odd aircraft model everywhere.

Outside Hall 1, Russia's Rosoboronexport had positioned a Kamov Ka-52 in Egyptian Armed Forces camouflage – it was the only real aircraft present. The rest were models.

The first morning saw the visit of Egyptian President Abdel Fattah Saeed Hussein Khalil el-Sisi, a former Army officer. His presence led to heightened security, which meant visitors were locked out until 1pm.

Egypt suffers from internal security issues, mainly in the Sinai Desert, and President El-Sisi is keen to modernise its military in a bid to defeat the Islamic militias.

On the air front, Rafale International displayed a large model of a single-seat Rafale DM.

The Egyptian Air Force (EAF) has ordered 12 Rafale DMs and eight dual-seat EMs, but another deal for an additional 12, announced in November 2017, has not yet been signed. The reason is said to be because the US Government is not allowing the delivery of a component for the Scalp stand-off weapon.



According to one source, a first batch of Scalps was delivered before the US intervened and the Egyptians are linking the 12-jet order with the Scalp.

MBDA designs and builds the weapon, known as Storm Shadow in the UK (mounted on Tornados until replaced by the Typhoon at end of March) and Black Shaheen in the UAE (launched from Mirage 2000-9s). However, a visit to the MBDA stand found no-one prepared to talk about the Egyptian contract.

Lockheed Martin was displaying a model of a C-130J in EAF markings. The US giant has been pursuing the Egyptian market for several years, and, according to one source, "is closer to sealing a deal than ever before".

In April 2016, it was reported Egypt had ordered two C-130Js

For three days in December, the Egyptian International Exhibition Centre in Cairo hosted the country's first ever defence exhibition – EDEX 2018. Alan Warnes was there.

to be delivered in 2019, but Lockheed Martin deny a deal has been done.

Next to the Hercules was an F-16 Block 52, which was being displayed with an AIM-120 advanced medium-range air-to-air missile (AMRAAM) and GBU-31 joint direct attack munition (JDAM). However, the US Government has not allowed the export of these weapons to Egypt, so none of the EAF F-16s operate them.

Their appearance might have some connection with an upgrade Lockheed Martin is offering for the EAF's 30 or so Block 15s. The EAF's fleet of nearly 200 F-16s are only equipped with AIM-7 Sparrows and AIM-9M Sidewinder air-to-air missiles, which means their air defence capabilities are substantially clipped.



A similar situation covers the air-to-ground role, where it is believed only Mk 81 and Mk 82 laser-guided bombs are used. So it is not surprising that Egypt wants the more capable Rafale, which is not involved in international traffic in arms regulations (ITAR).

Rosoboronexport was displaying a MiG-29M2 model at its stand. Egypt is in the middle of receiving 46 jets, which a source said was made up of a mix of 15 dual-seater MiG-29M2s and 31 single-seaters MiG-29Ms.

One of the single-seaters was lost in October, but the pilot escaped by managing to eject while inverted.

Meanwhile, another source said the EAF is still interested in the Pakistan Aeronautical Complex/Chengdu JF-17 Thunder.

An EAF delegation was briefed at China's Zhuhai Airshow in early November on the progress of the Block 3 versions, which the Pakistan Air Force will be operating in 2021. They are being offered with an airborne electronically scanned array (AESA) radar made in China.

The Block 3s will also be armed with SD-10A beyond-visual-range air-to-air missiles (BVRAAMs), C-802A anti-shiping missiles and stand-off weapons – all capabilities needed by the EAF.

The Arab Organization for Industrialisation (AOI) was displaying a large model of a K-8E Karakoram.

The Helwan-based aircraft factory assembled 120 K-8Es between 2000 and 2010, and is now overhauling them. ■



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La 6ème édition du Marrakech Airshow a tenu ses promesses sur la Base Ecole des Forces Royales Air. Un reportage de nos envoyés spéciaux **Vincent Chappard et Jeff Holmes** (photos).

MARRAKECH 2018 ATTEINT LES SOMMETS

« Marrakech 2018 hits the heights » – Page 68

Le Marrakech Airshow 2018 (MAS 2018) a été porté cette année par le symposium des chefs d'états-majors africains portant sur la sécurité et la défense. Il était organisé par le Commandement de l'Armée de l'air américaine en Europe et en Afrique, avec le soutien des Forces royales air du Maroc (FRA). Plus d'une centaine de hauts responsables militaires des forces aériennes d'une quarantaine de pays africains étaient présents et ont visité le salon. Cela a permis aux exposants et aux professionnels d'échanger et de prospector des opportunités d'affaires.

Les Etats-Unis avaient une forte présence avec de nombreux avions au sol et en vol dont les F16 de la FRA. Selon Glen K Lawson, international BD de Lockheed Martin, ce salon est un rendez-vous très important pour les USA et notre groupe. Il y a un partenariat fort avec le Maroc à travers de grands programmes de défense.

Le MAS 2018 a fait la part belle aux hélicoptères d'attaque. Bell a présenté son hélicoptère Bell 305 et surtout l'AH-1Z Viper, l'hélicoptère d'attaque bimoteurs. « L'AH-1Z Viper offre les meilleures performances sur le marché un prix très compétitif pour une avionique moderne et des coûts de maintenance faibles », soutient le directeur des affaires militaires, Vince Tobin.

Par ailleurs, ce fut une première réussie pour Turkish Aerospace qui a présenté son hélicoptère T-129 (voir encadré). Ces deux hélicoptères intéressent énormément les autorités marocaines ainsi que d'autres pays d'Afrique.

Parmi les nouveautés du salon, on notera la présence des institutions et organismes du Maroc (ministères, ONDA, GIMAS, RAM, ISMALA), Afrikaia, NSE Maroc, Jet Aviation ou encore Bio-Cellular Design Aeronautics (BDA, Africa). Cette dernière a pour ambition de s'affirmer en tant qu'intégrateur clé au Maroc dans le paysage des drones en Afrique et au Moyen-Orient.

Le MAS 2018 s'est ainsi fixé pour mission d'accompagner les mutations de l'industrie aéronautique et du transport aérien en Afrique.



Vince Tobin et le Bell AH-1Z Viper.

Damien Allard : « Cela reflète le potentiel du marché à la fois au Maroc et sur le continent africain »



UNE FORTE PRÉSENCE D'AIRBUS

Le consortium européen exposait le C295 de l'armée de l'air portugaise et un A330 MRTT de la RAF. C'était aussi l'occasion de célébrer des relations entre le Royaume-Uni et le Maroc pour le centenaire de la RAF.

Pour Damien Allard, le directeur des ventes au Maroc et en Afrique de l'Ouest, « le dynamisme du MAS 2018 a généré de nombreuses rencontres avec les délégations présentes sur le salon. Cela reflète le potentiel du marché à la fois au Maroc et sur le continent africain ». 206 C295 sont aujourd'hui en commande (166 en service) dans 29 pays. En Afrique, le C295 est opéré par l'Algérie, l'Égypte, le Ghana, le Mali et DAC Aviation au Kenya (dans le domaine d'opérations humanitaires).

DES OPPORTUNITÉS POUR JETEX

Jetex est présente depuis 2016 au Maroc où la société a développé cinq escales (Casablanca, Marrakech, Agadir, Rabat et Dakhla). Selon Julian Pitaresi, Morocco Stations Manager de Jetex, le MAS 2018 était un rendez-vous important pour ses clients.

« Nous avons achevé la rénovation de notre FBO à Casablanca en mars dernier et continuons à nous développer en partenariat avec l'ONDA. La construction de notre nouveau FBO de Marrakech est attendue par de nombreux clients. » Véritable destination phare pour l'aviation d'affaires, sa mise en service est attendue en 2019.

Jetex voit de nombreuses opportunités en Afrique où elle est déjà présente à travers des stations dans 11 pays. Le dernier né a récemment démarré ses services à Abidjan. « L'Afrique est un marché dynamique que nous souhaitons développer. L'aéroport de Tit Mellil nous intéresse à fortiori, c'est une continuité de notre agrément sur l'aéroport de Casablanca. »

LA MAPA CERTIFIÉE EASA

La Moroccan Aviation Private Academy a obtenu son agrément EASA pour la formation des techniciens de la maintenance aéronautique (B11 et B2). La mise en conformité avec les standards européens pour les pilotes est en cours.

Selon son responsable assurance qualité, Mohammad Khasawneh (photo ci-dessous), la MAPA est la première académie à recevoir cette certification en Afrique. « Notre ambition est de faire la promotion rapide de notre académie. Le MAS 2018 est notre point de départ et nous visons le marché africain. »





SABCA JOUE SON RÔLE EN AFRIQUE

Le groupe belge SABCA était présent au MAS 2018 pour promouvoir ses services en Afrique. SABCA est spécialisé dans la MRO (F16, Alphajet et Mirage), les drones, les « actuators » et la fabrication de pièces primaires, l'usinage, le traitement de surface et l'assemblage de sous-ensembles pour Airbus, Boeing Dassault ou Embraer.

Selon Raphaël Samson (à droite) L'objectif de SABCA Maroc est de développer l'activité de l'unité d'assemblage existante. « Nous avons également un projet en cours pour l'activité de MRO au Maroc pour les FAR et pour d'autres pays d'Afrique à travers un partenariat entre SABCA et SABENA Aerospace ». Le MAS 2018 a permis à la société de partager son savoir-faire sur le C-130 avec les nombreuses délégations présentes.



TROIS CONVENTIONS SIGNÉES PAR LE MAROC

L'ONDA et le GIMAS ont signé trois conventions avec des investisseurs de l'industrie aéronautique notamment Ratier Figeac Maroc, la société marocaine d'outillage aéronautique E.F.O.A et Laroche France. Pour Zouhair Mohammed El Aoufir, DG de l'ONDA, la politique menée par le Maroc aboutit à des résultats concrets et se traduit par la montée en puissance du nombre d'entreprises installées et des emplois créés. Karim Cheikh, DG du GIMAS, ajoute quant à lui que c'est le fruit d'un travail d'équipe avec l'ONDA et les agences étatiques. « Le Maroc parle d'une seule voix pour le développement de notre industrie et la formation des jeunes. »

LES PLANS DU MAROC POUR LES AÉROPORTS

Zouhair Mohammed El Aoufir a confirmé à African Aerospace l'achèvement des travaux du nouveau terminal de l'aéroport Mohamed V de Casablanca. « La capacité de l'aéroport passera à 14 millions de passagers. Cela faisait partie des projets majeurs que l'on devait clôturer pour aller de l'avant. »

Il a aussi annoncé les futurs projets au Maroc : un nouveau terminal moderne à Rabat (capitale des lumières) qui permettra d'accueillir jusqu'à 4 millions de passagers et la recherche d'investisseurs dans le cadre du partenariat public-privé pour le nouvel aéroport de Tit Mellil dédié à l'aviation d'affaires.

L'appel d'offres sera lancé d'ici les prochains mois. L'objectif est de lancer les travaux en 2020 pour une mise en service en 2022.



Inauguration du salon avec les démonstrations en vol.

À gauche: Tamer Ozmen : « Le T-129 est le leader dans son segment et sa performance est reconnue »

TURKISH AEROSPACE À L'ATTAQUE

Turkish Aerospace a marqué les esprits pour sa première apparition au MAS 2018 avec son hélicoptère d'attaque T-129.

Le groupe turc dispose d'une société commune avec Lockheed Martin. Elle a d'ailleurs produit plus de 300 F16 en Turquie. 40 T-129 sont aujourd'hui en service au sein de l'armée de l'air turque. Turkish Aerospace a également signé un contrat avec le Pakistan pour 30 hélicoptères.

Selon le directeur marketing et de la communication, Tamer Ozmen, Turkish Aerospace est en discussion avec le Maroc depuis 2017 concernant les besoins du royaume en hélicoptère d'attaque. Le T-129 est le leader dans son segment et sa performance est reconnue.

Turkish Aerospace considère le continent africain et l'Asie du sud comme des régions regorgeant d'opportunités.

The show was organised by the US Air Force Command in Europe and Africa, with support from the Royal Air Force of Morocco (FRA).

As well as providing visitors with the chance to exchange and explore future business opportunities, the event featured flying displays and also a busy static exhibition.

US military aerospace companies had a strong presence with many aircraft on the ground and in flight, including the FRA's F16s.

But it was attack helicopters that were given pride of place and Bell used the event to introduce its Bell 305 and its AH-1Z Viper twin-engined attack helicopter; a development of the US Marine Corps' Super Cobra.

According to the company's director of military affairs, Vince Tobin, the AH-1Z Viper, with its modern avionics and low maintenance costs, offers the best performance on the market.

The show was also important for Turkish Aerospace, as it presented its T-129 helicopter, which is of great interest to the Moroccan authorities, as well as many other African countries' air arms. Turkish Aerospace has a joint venture with Lockheed Martin. The partners have produced more than 300 F16s, as well as 40 T-129s that are currently serving in the Turkish Air Force.



According to the company's marketing and communications director, Tamer Ozmen, Turkish Aerospace has been in talks with Morocco since 2017 regarding the kingdom's attack helicopter requirements.

Airbus was much in evidence, concentrating on its C295 from the Portuguese Air Force, along with an A330 MRTT from the UK Royal Air Force.

The show was also a good opportunity to celebrate the UK RAF's centenary, plus many years of cooperation between the air arms of Great Britain and Morocco.

For Damien Allard, Airbus sales manager in Morocco and west Africa, the dynamism of MAS 2018 generated meetings with the many delegations visiting the show. "This reflects," he said, "the potential of the market, both in Morocco and elsewhere on the African continent, where, currently, 206 C295s are on order (166 in use) in 29 countries." In Africa, the C295 is operated by Algeria, Egypt, Ghana, Mali and DAC Aviation in Kenya, which uses the equipment in humanitarian operations.

MARRAKECH 2018 HITS THE HEIGHTS



High-flying show: Visitors enjoyed some amazing displays.

More than 100 top military air force officials from around 40 African countries visited the Marrakech Airshow (MAS2018), which was linked with a major symposium attended by a wide variety of nations' chiefs of staff representing security and defence.

Vincent Chappard reports.

Business aviation company, Jetex, has been present in Morocco for two years and, since 2016, it has developed five stopovers – in Casablanca, Marrakech, Agadir, Rabat and Dakhla.

According to the company's Julian Pitaresi, Morocco stations manager, MAS 2018 was an excellent opportunity to meet with his customers.

He said: "We completed the refurbishment of our fixed-base operation (FBO) in Casablanca in March and continue to develop in partnership with Moroccan Airports Authority (ONDA).

"The construction of our new Marrakech FBO is anticipated by many of our customers as it will be a true flagship destination for business aviation. We hope that it will open for business this year."

Jetex sees many opportunities in Africa, where it is already present through stations in 11 countries; the most

recent opening for business in Abidjan.

Pitaresi said: "Africa is a dynamic market that we want to develop. The airport of Tit Mellil, near Casablanca, interests us greatly."

Belgian group, SABCA, was present to promote its services in Africa. It specialises in military MRO for F16s, Alphajets, Mirages and unmanned air vehicles (UAVs). It is also involved in producing parts and undertaking machining, surface treatment and assembly for Airbus, Boeing Dassault and Embraer.



According to Raphaël Samson, SABCA Morocco's objective is to develop the existing assembly units. "We also have an ongoing project for MRO activities in Morocco for the FRA and for other African countries, through a partnership between SABCA and SABENA Aerospace."

Worldwide climate change, leading to an increased risk of forest fires, means that the Viking CL-45 amphibious water bomber is attracting worldwide attention and it also created a talking point at MAS 2018.

Morocco has five of the specialist aircraft and several countries are showing interest as it can undertake maritime surveillance and rescue missions along with firefighting.



Julian Pitaresi: "The construction of Jetex's new Marrakech FBO is anticipated by many of our customers as it will be a true flagship destination for business aviation."

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Humphrey Nkonde reports from the 48th Airlines Association of Southern Africa (AASA) annual general assembly in Zambia.

MAJOR CHALLENGES FACE SOUTHERN AFRICAN AIRLINES

Southern Africa airlines are facing several challenges, including low economic growth, blocked revenue in countries lacking foreign exchange, and the need to comply with the European Union's new personal data protection law.

These were some of the major findings to come out of the AASA annual general assembly and conference that was hosted by South African Airways at the Avani Victoria Falls Resort in Livingstone from October 11-14.

Airlines based in the sub-region will incur an estimated \$300 million loss in 2018 while Angola, Mozambique and Zimbabwe were, at the time of writing, withholding millions of dollars in airline revenue due to foreign exchange shortages.

In the next five years, passenger growth in southern Africa will be marginal, averaging between 2% and 3% annually.



The AASA gathering was held at the time when there was global, regional and local political uncertainty, market instability, and rising costs were taking their toll on trade, tourism and economic development.

Dignitaries attending included Paul Steele, International Air Transport Association (IATA) senior vice president, member and external relations and corporate secretary; Zambia's transport and communications permanent secretary, Misheck Lungu; and Poppy Khoza, director of the South African Civil Aviation Authority.

The conference heard that demand for air transport across sub-Saharan Africa will remain dampened by prevailing economic conditions, including gross domestic product (GDP) growth of 2.3%.

In his address to more than 200 delegates, AASA chief executive officer, Chris Zweigenthal, said it was projected that the aviation sector in Africa would register a 4.9% passenger growth annually over the next 20 years.



Chris Zweigenthal: "Data security requires urgent attention."

He said the figure for Africa would outpace the projected global expansion rate of 4.5%.

"For the aviation industry to develop, passenger growth must return to levels greater than 5% as soon as possible," Zweigenthal said. "This increased demand will have to be met with increased capacity, either with more flights or bigger aircraft. It will also need an appropriate investment in airport and airspace capacity."

As airlines grapple with low passenger growth, they have also suffered blocked revenue in Angola, Mozambique and Zimbabwe, which are all facing foreign exchange shortages.

"In September 2018, Angola was withholding \$416 million, Zimbabwe \$78 million and Mozambique \$5million," Zweigenthal said.

On the global scene, the new general data protection regulation (GDPR) enacted in the European Union in May 2018 to protect personal data for EU residents and visitors is causing problems to some African airlines.

Few African countries have drafted or promulgated cyber and data protection legislation, and where it has been done it is inconsistent.

Airlines, including those in Africa, are

required to comply with the EU's GDPR if they sell or market services and products to EU citizens and residents.

AASA has called on governments to adopt a consultative approach in formulating cyber and data protection legislation policies, as well as laws.

"Data security requires urgent attention," Zweigenthal said. "Attacks and breaches of IT systems and databases have caused customers to demand greater diligence by airlines and other organisations. Personal data protection is a legally enshrined human right."

In his keynote address, Steele, said technology was seen as the next driver of change in the aviation industry.

The good news is that 80% of Africans were now connected to mobile technology, which has led it to be a global leader in mobile banking.



"For airlines, these technologies offer added value and efficiency to better meet expectations of passengers," Steele said.

He noted that customers expected an improved security experience, as they did not want to wait in long queues to get through security.

"The IATA-Airports Council International (ACI) smart security project aims to improve experience, efficiency and effectiveness of security. It was piloted by the Airports Company of South Africa at Oliver Tambo International Airport in 2017, but to date no other southern African airport has followed suit," Steele said.

He explained that passengers hated mislaid and late bags, adding that IATA resolution 753 helped to track bags.

"South African stakeholders have set up a working group to oversee the full implementation of baggage tracking according to resolution 753," Steele said.

Additionally, many African countries, including Zambia where the AASA gathering was held, are lagging behind in



A happy gathering: The 2018 AASA delegates.

PICTURE: ATHOL FRANZ

biometric identification at airports. “New technologies, such as facial recognition, are beginning to revolutionise not only the way in which we get passengers through immigration but also how to process them through their journey. A recent test in Los Angeles, using biometric facial recognition to board passengers on an A380, saw boarding time halved from more than 40 minutes to just about 20, thus reducing waiting, stress and enabling on-time departure,” Steel said. He added that passengers wanted real-time updates on travel information through their mobile devices.



However, other speakers noted that although information and communications technology (ICT) had helped improve efficiency in the aviation sector, social media had also had a negative impact on airline and airport operations.

South African entrepreneur, Mummy Mthembu-Fawkes, making a panel presentation on bridging the communication and delivery gap between the aviation industry and the customer, said numerous complaints on social media had emerged, partly because of customers who were born in this millennium.

Mthembu-Fawkes said that group of customers used ICTs abundantly and wanted things done quickly.

In addition, Zambia Airports Corporation Limited (ZACL) director of

airport services, Agness Chailla, said some of the complaints that customers posted on social media on passenger experience were unfounded.

“We have members of staff monitoring social media. Sometimes I respond to social media complaints at night,” Chailla said.

She was among panellists who discussed matching the passenger’s airport and airline expectation with their experience.

Although the aviation industry is facing challenges in southern Africa, there are some success stories in airport infrastructure development in some countries, including Zambia.

Chailla said Zambia decided to modernise airports so that the passenger experience matched with what was being achieved in other countries.

Zambia, through debt financing mostly from China, has mobilised about \$1 billion to upgrade and develop three international airports. Work is expected to be completed by the end of 2020.



Poppy Khoza: “If operators in Africa do not take advantage of open skies, airlines from other parts of the world will overtake them.”

ZACL is building the \$397 million New Copperbelt International Airport that will have a terminal with a capacity of one million passengers.

A new terminal building with a capacity of four million passengers and other facilities is being constructed at Lusaka’s Kenneth Kaunda International Airport at a cost of \$360 million.

Another terminal building with a capacity of one million passengers has been completed at Livingstone’s Harry Mwaanga International Airport, through which AASA delegates arrived and departed.



However, developing and sustaining the aviation industry in Africa has much to do with the Africa Union’s Agenda 2063, which has identified the sector as critical, requiring open skies in the form of a single continental air transport market.

ICTs will have to be used extensively to improve connectivity, reduce costs, improve customer experience and comply with data protection laws, such as those in the EU.

The open skies concept was aptly put across by Khoza, who also called for gender balancing in the aviation industry.

Delivering a keynote speech on behalf of Dr Bonginkosi Nzimande, South Africa’s Minister of Transport, she said: “If operators in Africa do not take advantage of open skies, airlines from other parts of the world will overtake them. The time is now to make inroads so that interconnectivity hurdles within the African continent are addressed.”



North African business aviation operators along with others from sub-Saharan Africa travelled to Dubai for the Middle East Business Aviation Association (MEBAA) Show, which covers Middle East and North Africa. **Marcelle Nethersole, Steve Nichols, Dave Calderwood and Alan Peaford report. Pictures by Tom Gordon and Ian Billingham.**

MEBAA on the road to Morocco

Confidence in the business aviation industry in north Africa remains strong said Ali Alnaqbi, MEBAA's founding and executive chairman, as he confirmed the third MEBAA Show Morocco would go ahead on September 25-26 2019.

His optimism was backed by figures from the WingX Business Aviation Monitor, which said flights to Africa were trending up by 8% in September.

Alnaqbi announced details of the show at the MEBAA event in Dubai. It will be held at the Marrakech Menara Airport, he said.

Due to its strategic location between Europe, the Middle East, and the rest of Africa, Morocco is seeing an increasing amount of movements, which also includes flights servicing the South American market.

A new business airport will open in the country within the next few years, which will complement the new fixed-base operations (FBOs) by Jetex and Swissport Executive Aviation.

In addition, the number of business aircraft movements in the MENA region is predicted to reach 175,000 by 2020, while the number of registered aircraft is expected to increase to 1,200. This sharp increase is attributable to the region's thriving economies – notably Morocco – and an expanding wealthy elite using business aircraft in increasing numbers.

The Moroccan Government has



recognised the potential for employment and development offered by the industry and is actively investing in creating an attractive environment for manufacturers. The MEBAA Show Morocco has received government support, with HE Mohammed Sajid, Minister of Tourism, Air Transport, Crafts and Social Economy, saying it plays an important part in giving the industry access to these opportunities.

"MEBAA Show Morocco will help reinforce the importance of business aviation to local officials and prospective owners and operators, while also addressing transport issues faced by the region," Alnaqbi said.

The 2019 event will also host the MEBAA Conference Morocco, featuring key business leaders and roundtable discussions to promote debate and share industry knowledge.

Ali Alnaqbi: "MEBAA Show Morocco will help reinforce the importance of business aviation to local officials and prospective owners and operators."



The JetGo power unit is 60% more fuel efficient.

POWER TO THE PEOPLE

Aero Specialties was at the show displaying its latest aircraft ground power unit, the Aero JetGo 600Mti-RJ 28V DC diesel hybrid.

The American company, which provides complete aircraft and airport ground support equipment (GSE) solutions to corporate, FBO, MRO, military, airline and general aviation customers worldwide, was aiming to further tap in to the MENA market.

"The JetGo power unit is very popular as it is 60% more fuel efficient, very quiet, and inexpensive," said Seth Stansell, global sales specialist.

The Bell 505 displayed on the static park.

Bell targets MENA growth



The MENA region is key to Bell's helicopter growth strategy, according to Sameer Rehman, managing director for the Middle East and Africa.

The company was showing both Bell 429 and Bell 505 helicopters at the show and said the twin-engined Bell 429 is designed with the future in mind and has a cabin that can be easily customised.

It has found favour with search-and-rescue operations and VIPs, with more than 300 flying.



Greg Laxton (left) with Captain Alex Fecteau.

Unveiled: the new BBJ model

Boeing Business Jets announced its new BBJ 777X model at MEBAA, describing it as the longest-range business jet ever.

Customers can choose between two models, the BBJ 777-8 and BBJ 777-9.

The BBJ 777-8 offers the longest range at 11,645nm (21,570km) and a spacious 3,256sqft (302.5sqm) cabin. The dash 9 provides an even larger cabin measuring 3,689sqft (342.7sqm), while offering a slightly lower range of 11,000nm (20,370km).

Greg Laxton, president, said the BBJ 777X is capable of flying more than halfway around the world without stopping. "It can connect virtually any two cities in the world, flying faster than any business jet ever built," he said.

"Our most exclusive customers want to

travel with the best space and comfort and fly directly to their destination. The new BBJ 777X will be able to do this like no other aircraft before it, redefining long-range VIP travel."

Captain Alex Fecteau, BBJ director of marketing, said: "The BBJ 777X features a new 72 metre composite wing and the world's tallest cabin at 2.4 metres. It will also feature the new GE9X engines, offering 5% lower fuel consumption than competing engines.

"Its patented Boeing smoother ride technology features 'smart sensors' and is designed to reduce motion sickness by dampening the effects of turbulence. The BBJ 777X is the largest twin-engine in the world and will offer heads-of-state and VVIPs lots of benefits," Fecteau said.

MAINTAINING WIFI STANDARDS

With an increase in on-board connectivity on business jets, there has been growing concern by owners and operators about the risk of additional maintenance costs. These are now being addressed by Jet Support Services Inc (JSSI). The independent maintenance support and financial services provider announced that Wi-Fi coverage is now included as a standard feature on all its new airframe programmes. Previously an add-on option, customers seeking airframe protection for their aircraft will now automatically benefit from Wi-Fi equipment and related component coverage at no additional cost, the company said at MEBAA.

"This latest upgrade reflects the changes in technology and advanced avionics we are increasingly seeing on board modern business jets," said Gregory Olympios, director business development.

"Wi-Fi used to be a rare item on business jets but is increasingly everywhere we go and is now a feature most of our clients expect to see on board. Now the Wi-Fi equipment components installed on their aircraft will be included at the time of enrollment, covering all scheduled, unscheduled and routine maintenance," he said.



Gregory Olympios: "Wi-Fi is a feature most of our clients expect on board."



Warwick Stone, MRO business development manager, ExecuJet (left) with Didier Perrin, director sales and marketing, Europe, Middle East and Africa, for Collins Aerospace.

STAGE-MANAGED SUCCESS FOR COLLINS AEROSPACE

The newly named Collins Aerospace (formerly Rockwell Collins) boosted its African connections at MEBAA when it announced a third customer had signed a contract with ExecuJet in South Africa to equip its Bombardier Global Express with Collins' 'Stage' in-flight entertainment system.

Stage provides private and corporate jet VIPs with access to a wide range of entertainment, including a massive library of more than 1,100 Hollywood movies and TV shows, many available in high definition.

The system can also supply news, sports, and weather feeds, plus personal content, all delivered to passengers' mobile devices.

Warwick Stone, MRO business development manager, ExecuJet, said the Collins Aerospace Stage solution was very popular. "It can handle the latest Hollywood content with digital rights management (DRM)-protection. All the user has to do is sync their content every 30 days to maintain access," Stone said.



A Mercedes Benz interior in the ACH145.

Stylish debut for ACH

Airbus Corporate Helicopters (ACH) made its MEBAA Show debut following the European OEM's decision in May last year to develop a new division to focus exclusively on the corporate and private aviation sector.

"The use of VIP helicopters is growing," said Nitin Sareen, head of marketing global business.

"Airbus is the only manufacturer to offer both private jets and helicopters in its portfolio, Sareen said. "We want to leverage this as there are obvious opportunities where an owner can come into the airport in the ACJ and then complete the journey to the final destination with their helicopter."

ACH was keen to push its specially outfitted light twin Airbus ACH145 to the region's VIP operators. Designed to deliver performance throughout the flight envelope, the H145 demonstrates capability and flexibility, especially in high and hot operating conditions, Sareen said. ■



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For further information, please contact Mr. Vincenzo De Laurentis - Email: delaurentis@euwings.it - Mobile: +39 340 60 19 909.

Africa's premier aviation event gets under way in February in Rwanda.

David Wilson and Vincent Chappard look at why this is one event that should not be missed.

SUMMIT SPECIAL: A WHO'S WHO OF AFRICAN AVIATION

Organisers of the Aviation Africa Summit and Exhibition are setting their sights on new heights as the event returns to Kigali, capital of Rwanda, on February 27-28 this year. Working in conjunction with the Rwandan Government and, in particular, the Rwandan Civil Aviation Authority, this year's summit expects more heads of state, government ministers, civil aviation authorities and leaders of airlines, MROs and other aviation services businesses, than ever before.

This year, more than a dozen air chiefs are also expected to attend, reinforcing the goal of bringing all aspects of the industry together.

Africa remains one of the greatest potential markets for air transport on the globe and this year's annual event will explore even further afield, with the show organisers promising speakers that are both "down to earth" and "out of this world".

"Our plan at the very beginning was to create an event that cut right across the different industry sectors," said Mark Brown, managing director of the organiser – Times Aerospace.

"There are events across Africa that cover the individual sectors like airlines, regulators, business aviation, MRO and defence. But there has been nothing that brings it all together.

"So often we hear airlines or business aviation operators wishing for more communication with different CAAs; we hear regulators expressing concern about airspace issues between civil aviation and military. And that is why we wanted to bring people together."



The event is built around networking. Invitations from the government of President Paul Kagame – the current head of the African Union – have been sent to countries across the continent, especially vital as the AU pushes forward with implementation of the single African air transport market (SAATM) agreement

Alongside the exhibition – which will feature more than 120 organisations and companies from around the world – is a highly-rated conference.

Airline business will be a major component of the conference. "We are involving many different airlines of different sizes from across Africa," said conference chairman, Alan Peaford. "We often see the big airlines at events, but we want to hear from some of the small regional carriers, to hear how they are addressing the challenges within their own countries. We are thrilled to have airlines from the French-speaking countries such as Air Senegal and Air Austral, as well as from Spanish-speaking Equatorial Guinea."

Simultaneous translation in English and French will be available throughout the conference. Keynote addresses will come from the International Air Transport Association (IATA) as well as the African Airlines Association (AFRAA).

Headline presenters include one of the top names among airline CEOs – the current IATA chairman and the CEO of the successful Middle

Continued
on Page 76



HE Akbar Al Baker faces a one-on-one interview with summit chairman Alan Peaford.

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Eastern carrier Qatar Airways, HE Akbar Al Baker.

And, stretching destinations even further, is globally recognised inspirational speaker, Dr Adriana Marais, the South African set to become Africa's first extra-terrestrial, when she completes her one-way mission to Mars.

Al Baker, will be centre stage for the air transport segment of the summit.

"Qatar is one of the airlines that has been expanding into Africa in recent years," Brown said. "There has often been concern expressed by African airlines about the growth of non-African airlines, but I think many of them may not have heard Mr Al Baker share his views. I know people are in for a treat."

Al Baker will be on stage for a one-on-one interview with summit chairman, Peaford.



Stepping into the unknown will be key to the presentation by Dr Marais – a quantum biologist, a theoretical physicist, the director of the South Africa Space Foundation and head of innovation for SAP Africa.

She is part of the Mars One project, which is currently going through its selection process to take 24 astronauts to the Red Planet to begin building a society there.

"She is an incredible speaker and has been inspiring school children and adults to look up to the skies and think about the new horizons – and what value space exploration can bring to Earth. She genuinely changes the way people think about our planet and it is fantastic that she will be sharing her incredible story here on her own continent," Peaford said.

While heated debate continues over the commercial and political value of SAATM, one global civil aviation expert will use the summit to outline essential plans for another single sky – one focusing on search-and-rescue (SAR).

Keynote speaker, Brian Day, will deliver a controversial presentation on aspiring to a single SAR sky over Africa.

Day was Australia's national manager for aviation search-and-rescue before becoming the International Civil Aviation Organization (ICAO) HQ technical officer, SAR, for eight years. While there, he facilitated the development of provisions for the delivery of global civil aviation SAR services, conducting many technical cooperation missions worldwide and assisting in the provision of emergency response to distressed states such as Kosovo, Sudan, Iraq and Lebanon.

For five years he managed the ICAO/

African Civil Aviation Commission (AFCAC) SAR Project to Africa, when he evaluated and provided advice to some 35 African states, and was a SAR advisor to the United Arab Emirates Air Force and its civil aviation authority.

"The time is now overdue for us to commit to an Africa-wide organisation of aviation rescue coordination centres that are seamlessly knitted together into a single system of SAR excellence," he said. "Just as a single sky gives the prospect of improved commercial options, so a single SAR sky would provide a safety net able to ensure that, when an airline catastrophe occurs over the continent, it will not be grossly magnified and ineffectually broadened by wholesale SAR incompetence."

Speakers from AFCAC, ICAO, the African Development Bank, and many major MRO, finance, training companies and innovators, will also be attending and addressing the summit.

■ Times Aerospace is also the publisher of *African Aerospace* magazine.



Dr Adriana Marais is aspiring to become one of the first human settlers on Mars.

SOMMAIRE

LE WHO'S WHO DE L'AVIATION AFRICAINE

Le premier événement aéronautique d'Afrique, Aviation Africa Summit and Exhibition, se tiendra les 27 et 28 février 2019 à Kigali (Rwanda).

David Wilson et Vincent Chappard nous expliquent sa pertinence.

Ce sommet, organisé en collaboration avec le gouvernement rwandais et en particulier avec l'aviation civile rwandaise, prévoit une augmentation du nombre de chefs d'État, de ministres, d'autorités de l'aviation civile et de dirigeants des compagnies aériennes, de la MRO et des prestataires de services aéronautiques.

Plus d'une douzaine de « Air Chiefs » seront également présents, renforçant ainsi l'objectif de concilier tous les aspects de l'industrie.

L'Afrique reste l'un des marchés avec le plus grand potentiel en matière de transport aérien au monde. Cet événement annuel explorera davantage ces atouts à travers des intervenants de haut niveau.

« Notre objectif initial était de créer un événement couvrant un spectre très large de l'industrie », explique Mark Brown, directeur général de Times Aerospace, l'organisateur. « Il s'agit de réunir toutes les parties concernées sur une même plateforme pour échanger les expériences et les craintes, se comprendre et réfléchir sur des réponses à trouver sur les problématiques et les enjeux de notre industrie.

L'événement est construit autour d'un réseautage. Le gouvernement du président Paul Kagame - l'actuel président de l'Union africaine - a invité tous les pays du continent à un moment crucial vital où l'UA encourage l'application de l'accord du SAATM.

Parallèlement à l'exposition - qui réunira plus de 120



Brian Day présentera un exposé controversé sur l'aspiration à un ciel unique de RS sur l'Afrique.

organisations et sociétés du monde entier - se tiendra une conférence sur le transport aérien. « Nous impliquons de nombreuses compagnies aériennes de tailles différentes sur tout le continent », souligne le président de la conférence, Alan Peaford. « Nous voyons souvent les grands transporteurs lors d'événements mais nous souhaitons savoir comment certains petits transporteurs régionaux abordent les problèmes qui se posent dans leur pays. Nous sommes ravis d'accueillir des compagnies aériennes des pays francophones comme Air Sénégal et Air Austral, ainsi que de la Guinée équatoriale qui est hispanophone. »

Les allocutions principales émaneront de l'IATA et de l'AFRAA.

Parmi les présentateurs phares figurent des PDG de renom dont celui de Qatar Airways, le président de l'IATA et Adriana Marais, directrice de la South Africa Space Foundation qui fait partie du projet Mars One. Brian Day présentera un exposé sur le thème « Aspiring to a Single SAR Sky over Africa ».

Des conférenciers de la CAFAC, de l'OACI, de la BAD et de nombreux organismes de micro-financement, des organismes de financement, de formation et de l'innovation participeront également au sommet.

■ Times Aerospace est également l'éditeur du magazine *African Aerospace*.

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Clive Rankin: "Planning and foresight are imperative."

Will CFM's policy

The landmark agreement by CFM International to open up the aftermarket for its best-selling CFM56 engines should be good news for African airlines. Chuck Grieve reports.

When CFM International's new conduct policy (CP) on its popular CFM56 engines comes into effect in February 2019, the entire airline value chain will be watching with interest.

For Africa, with its large fleet of CFM56-powered airliners, it could help unlock some of the continent's forecast potential.

The deal, agreed last July with the International Air Transport Association (IATA) is designed to enhance the opportunities available to third-party providers of engine parts, and maintenance, repair and overhaul (MRO) services on the CFM56 and the new Leap series engines.

A competitive MRO market is particularly good news in Africa, where CFM56-powered Airbus A320 and Boeing 737 narrow-bodies dominate the medium-haul fleet.

The CFM56 is acknowledged as the most successful aircraft engine of all time, with more than 30,000 examples delivered over four decades. About 13,400 are currently in service worldwide.

With that success has come logistical challenges, which MRO sources say have been exacerbated by the tight control maintained by the original equipment manufacturer (OEM), a GE/Safran joint venture, over who services its engines and what parts they can use.

MRO sources point to the predicted logjam in CFM56 shop visits in the next three-to-four years, and the difficulties being experienced in sourcing parts, as incentives for the OEM to bow to airline pressure via IATA.

One industry contact suggested the deal is a direct consequence of the Southwest Airlines

NEW PLAYER JOINS AFRICAN MRO MARKET

The underserved African maintenance, repair and overhaul (MRO) market is a growth opportunity for Abu Dhabi-based MRO Turbine Services & Solutions Aerospace (TS&S) in its long-term strategy of global expansion, writes *Chuck Grieve*.

The company is taking an important step into the African MRO market with its newly forged relationship with Ethiopian Airlines.

The memorandum of understanding (MoU), signed last July, reinforces TS&S' commitment to what it sees as a key growth market, and furthers its strategy of building strategic partnerships with leading airlines.

Under the agreement, the partners will establish centres of excellence for auxiliary power units (APUs) and engine on-wing care. Discussions continue on the establishment of these facilities.



Acting chief executive, Mansoor Janahi, sees the MoU as "an important first milestone" in a relationship that is key to TS&S' entry into the African market.

He said the ambition and achievements of Ethiopian Airlines are "impressive", while the carrier's strategic outlook "is fully aligned with our growth strategy".

Despite the region's expected fleet growth, it is "underserved" in MRO, with just 15% of a \$600 million annual MRO spend carried out there – a situation Janahi expected to be exacerbated by fleet expansion.

"We are a global company and the African market is part of our wider global growth strategy," he said. It holds "ample opportunities for TS&S to contribute our



Mansoor Janahi (inset) sees the MoU as "an important first milestone". TS&S specialises in the Rolls-Royce Trent 700, V2500 and General Electric GENx engines (pictured).

capabilities" in partnership with Ethiopian Airlines. TS&S specialises in the Rolls-Royce Trent 700, V2500 and General Electric GENx engines.

Analysts view Africa as a growing aviation market. By 2035, intracontinental airline traffic is expected to expand by 6.7%; traffic between Africa and Europe by 5%; and to the Middle East by 7.3%.

"This is what excites me about the market opportunities and why Ethiopian is the right partner

for us," said Janahi. "In the near term, our agreement encompasses serving the domestic market needs of the African carriers, and in the long term, servicing the airlines as they expand internationally out of Africa.

"Our history and our contributions towards supporting the UAE in realising its potential in becoming an advanced, competitive and impactful aerospace hub will be the foundation of our future operations and growth." ■

unlock Africa's potential?

Flight 1380 tragedy in April 2018, when the failure of a fan blade led to a passenger's death. The subsequent emergency airworthiness directives (EADs) on the CFM56-7B fleet highlighted a problem with the availability of parts from the OEM. "CFMI doesn't have the capacity to produce as many as they need," said the source.

It was aware of the problem, he said, and "obviously" was putting measures in place to boost its manufacturing output. But, meanwhile, "all parts providers are having difficult times getting these parts to meet customer requirements".

A statement from CFMI said the CP "reaffirms its commitment to maintain and foster robust and open competition within the MRO market", as well as the competitive nature of its MRO model.

Leading independent MRO and CFM56 specialist, MTU Maintenance, sees the CP as "great news" for African airlines.

Clive Rankin, MTU's Africa sales director, said the CFM56 is "exciting to observe" at the moment because of the size of the installed fleet, while the

related MRO market is "dynamic and healthy".

In Africa, he said, many CFM56-3 engines are still flying, while the -5B fleet is relatively young, with an average age of only 10-11 years in the region.

"Once an engine matures, as we are currently seeing with the CFM56-3, the MRO focus is on reducing costs and maximising value for operators and owners. Luckily, the mature engine market also offers alternative material, such as used serviceable material or green-time engines, and enables more flexible solutions."



Rankin said MTU Maintenance expects CFM56-5B shop visits to peak before 2020, although the large installed fleet will provide "strong demand" throughout the next decade. "We are currently seeing a surge in demand for spare engines here," he added.

For the CFM56-7B, which has a much larger installed fleet, the peak in shop visits is likely to occur in the mid-2020s, with significant demand into the 2030s.

In the earlier phases of an engine's working life, such as for younger fleets like the -5B and -7 variants, the MRO focus tends to be on longer-term and cost-effective operations, with increased on-wing times as a way of reducing costs, said Rankin.

Operators and their MROs can achieve this through services such as optimised fleet management, customised workscoping, alternative repairs, engine trend monitoring and on-wing support.

Rankin said finding CFM56-5B and -7B induction slots could be challenging. "Engine shops in general are full and planning and foresight are imperative. This is something that has been a key issue in negotiations in recent years."

MTU Maintenance has around 30 customers in Africa and is "working intensively" with them to make sure they get the services they need within the timeframe desired.

Investment in the MRO's facilities in Hanover, Germany; and Zhuhai, China; are designed so the forecast growth in demand can be easily absorbed. ■



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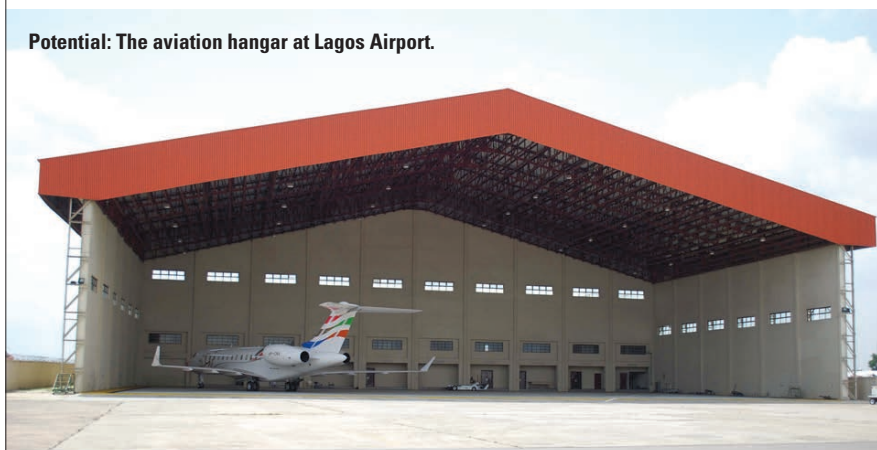
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Chukwu Emeke *highlights one of the major challenges facing west African airlines.*

MRO looks set to break through in west Africa

Potential: The aviation hangar at Lagos Airport.



Since the demise of former west African national carriers, such as Nigeria Airways and Air Afrique, airlines across the sub-region have struggled for survival.

There have been considerable economic pressures, with aircraft maintenance costs gulping up 30 to 40% of operating costs – no thanks to the absence of a maintenance repair and overhaul (MRO) centre.

Nigeria’s Minister of State for Aviation, Hadi Sirika, said airlines are spending at least, \$1.8 million on each C-check on their B737 classic aircraft – the most commonly used type for domestic flight operations in Nigeria.

The acting director-general of Nigeria’s infrastructure concession regulatory commission (ICRC), Chidi Izuwah, said: “Considering the importance of MRO, it is incomprehensible that none exists in the west African region 98 years after the first aircraft landed in Nigeria in 1920.



“The lack of an MRO has had a negative impact on the survival of airlines in the region. They have struggled to maintain their fleet or stay in business for consistently long periods due to the exorbitant cost of maintenance and the time it takes to fly the aircraft for checks.”

He added that a demand forecast study had shown that more than half of the \$3 billion annual expenditure by African airlines on maintenance was taken outside the continent.

He was perturbed at the situation where less than 80 aircraft are operated by airlines in Nigeria, serving a population of more than 180 million people with in excess of 30 airports.

The CEO of 7 Star Global Hangar, Isaac Balami, said a

single B737 aircraft grounded and awaiting maintenance had a negative impact of more than \$100,000 per day to the owner and operator airline.

Air Peace chairman, Allen Onyema, added: “The kind of money we spend in Air Peace when we go for maintenance... the legacy airlines of this world do not spend half of it. We spend close to \$2.5 million to \$3 million doing C-Checks and D-Checks.”

To stem the trend, many in the sector have called for investment in a locally housed MRO and the ability to take advantage of MRO partnerships.

“There is an urgent need for local investment. It will reduce maintenance and personnel costs, which take a higher percentage of airlines operating budget,” said Captain Fola Akinkuotu, former managing director of Aero and current CEO of Nigeria Airspace Management Agency (NAMA).

He said such investment would bring job creation for youngsters and professionals, and make airlines more profitable.



The aviation safety round table initiative (ASRTI) has repeatedly stressed the need “for local airlines to pull resources together and establish local maintenance facilities as a way of reducing aircraft maintenance costs”.

Nick Fadugba, chairman of the African Business Aviation Association (AFBAA), advocates joint training, MRO spares pooling, joint operations, interlining and code-sharing as measures that could help to minimise the MRO challenges in west Africa.

Now, hope seems to be rising.

At the second annual AviationGhana breakfast meeting next month, Ghana’s former aviation minister, Cecilia Abena, plans to submit a memo to the ministry of finance, proposing the removal of taxes on aircraft spare parts.

The new minister, Joseph Kofi Adda, also recently called on airlines, through the board of airline representatives (BARGH), to furnish his office with the requisite data to inform policy decisions.

The Nigerian Civil Aviation Authority has also issued licences to a few aircraft maintenance organisations (AMOs), while 68 aircraft maintenance engineers’ licences were issued between January and June 2018.

Sirika has received from the ICRC the outline business case certificate for a proposed MRO facility by Nigeria’s Government.

He says the MRO, when established, would serve as a maintenance facility for both Nigerian airlines and other airlines in west Africa.

Considering the importance of MRO, it is incomprehensible that none exists in the west African region 98 years after the first aircraft landed in Nigeria in 1920.

CHIDI IZUWAH



More jobs: Ethiopia prepares for new manufacturing opportunities.

Now Ethiopia is set to cut it as a part player

Morocco, Tunisia and South Africa already have successful aerospace manufacturing industries. Now Ethiopia is about to establish its own aerospace cluster in east Africa. Kaleyesus Bekele reports.

According to a White Paper on the African aerospace industry, launched by Airbus recently, the global aerospace industry is valued at \$838 billion.

Three African countries – South Africa, Tunisia and Morocco – are among the 45 largest aerospace manufacturing nations in the world as measured by the value of components produced largely for export.

The rise of Tunisia and Morocco in the past two decades has been powered largely by their proximity to key European aerospace powers.

Airbus' paper outlines that the key benefit of the aerospace industry in Africa is the number of highly skilled jobs it creates – both directly and indirectly.

South Africa's aerospace sector directly employs around 15,000 highly skilled engineers and is estimated to support at least 60,000 further skilled jobs in the economy.

In Tunisia, aerospace manufacturing directly employs more than 9,000 people, while Morocco's aerospace manufacturing cluster, which consists of more than 110 companies, directly employs around 11,500 people.

South Africa and Morocco are ranked 33rd and 36th respectively in terms of the total size of their aerospace industry. Morocco has more than 100 aerospace facilities dedicated to aero structures components and wire harnesses. In Tunisia there

are around 70 export oriented aerospace companies that employ about 13000 people.

Morocco's push for international investment in its aerospace sector may serve as a template for emerging nations seeking to develop an aerospace industry.

The country has seen a rapid growth of its aeronautical sector. Official figures through 2016 said the industry had seen export sales grow tenfold to \$1 billion. Revenue has risen 17% per year, on average, since 2009.

The size of aerospace manufacturing sectors in South Africa is valued at \$1.8 billion, Morocco \$1.1 billion and Tunisia \$0.43 billion.

Inspired by the success stories of the three African nations, Ethiopia is planning to develop its own aerospace manufacturing industry. Its national carrier, Ethiopian Airlines, is working on a plan to nurture an aerospace cluster in collaboration with global aircraft and engine manufactures.

Ethiopian Airlines Group CEO, Tewolde Gebremariam, said that, pursuant to the Ethiopian Government's industrialisation policy embedded in the country's growth and transformation plan, his organisation is working in partnership with aircraft manufacturers and other aerospace suppliers to establish and develop a labour-intensive manufacturing industry with a wide portfolio of products.

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on Page 82

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Ethiopian MRO has long years of experience in maintaining aircraft and engines. "Using that experience, we want to establish an aerospace industry in Ethiopia that designs and manufactures various aircraft parts," he said.

Ethiopian has been operating a small wire harness kit manufacturing facility at its main hub in Addis Ababa. Opened in 2009, it supplies seat-to-seat wire harnesses for all Boeing commercial aircraft programmes. The airline is now planning big to incorporate a full-fledged aerospace manufacturing plant in Addis Ababa.

According to Gebremariam, Ethiopian is in talks with Boeing, Airbus, Bombardier and others, to jointly incorporate an aerospace manufacturing company in Ethiopia. "We are holding discussions with these global aviation giants on the possibility that we can incorporate the company together. We not only want to manufacture and supply the products but we also want them to have a stake in the planned project," he said.

Mesfin Tasew, Ethiopian Airlines chief operating officer, noted that, in line with the Ethiopian Government's industrialisation strategy, the airline is planning to develop the aerospace manufacturing industry that would employ young university graduates. Tasew said Ethiopian would establish the aerospace manufacturing industry as a new business unit in partnership with aircraft and engine manufacturers.

"It is at an embryonic stage now. But we are in discussion with several manufactures including Boeing, Airbus, Honeywell, and Bombardier. Today we have small wire kit manufacturing facility. It is an aerospace manufacturing facility, though it is at micro level."



According to Tasew, Ethiopian has agreed with Airbus to start manufacturing certain aircraft parts. "It is under discussion," he said.

Ethiopian is also in the process of manufacturing an aircraft heat shield blanket that is installed at the aircraft fuselage exterior and the cabin. It is used to maintain the cabin temperature. "We are going to start manufacturing the blanket here in Ethiopia in partnership with Boeing."

Ethiopian and Airbus have agreed to manufacture certain aircraft parts in Ethiopia. Ethiopian is also planning to manufacture some aircraft parts like sheet metals, machine parts and wire kit for Bombardier, the Canadian aircraft manufacturer. "We are planning to do this in partnership with Fokker, a company that supports Bombardier," Tasew said.

Ethiopian has signed a memorandum of understanding with South African aerospace engineering company, Aerosaud, to cooperate in manufacturing aircraft parts in Ethiopia. "Aerosaud is not a manufacturer but it is an engineering company that brings in technology to assist us. The original equipment manufacturers do not only support us to develop the capability



“We want to establish an aerospace industry in Ethiopia that designs and manufactures various aircraft parts.”

TEWOLDE GEBREMARIAM

but also buy our products,” Tasew said. “The aerospace manufacturing industry requires special care, design and quality control. And we are going to do the job in partnership with aircraft manufacturers,” he added.

The manufacturing facility will be approved by the US Federal Aviation Administration (FAA), the European Aviation Safety Agency (EASA), and be certified by aircraft manufacturers.

The Ethiopian aerospace manufacturing industry will recruit young university and technical school graduates.

There is currently no aeronautical engineering department in any of the universities in the country but Ethiopian hopes to work with the Addis Ababa University Faculty of Science and Technology and other universities and technical schools. “We will hire young engineers and train them in our aviation academy,” Tasew said.

Ethiopian recently signed a partnership business agreement with ACM Aerospace of Germany that would enable it to set up a facility in Ethiopia to manufacture and supply aircraft seat covers, safety belts, carpets and many other interior parts to ACM.

According to the agreement, the facility will have the EASA part 21G certified production facility (POA) certification, which is a core requirement to be met in the industry.

Gebremariam said the partnership agreement is a big milestone in realising Ethiopia's plan to set up an aerospace manufacturing industry. “The project will surely create significant job opportunities for the young, educated taskforce and will support and synergize with the textile and leather manufacturing industries being developed in the country.”

ACM Aerospace specialises in aircraft seats and other interior parts. Seat covers, carpets and other cabin interior parts are manufactured from special fabric and leather materials that are certified and meet the strictest requirements set by aviation regulators. Accordingly, the facility will, in the beginning, import such raw materials.

However, it will shortly have the capability to certify the leather and fabrics that are produced in Ethiopia and use them in the production process, thereby supporting the textile and leather manufacturing industries of the country.

According to Ethiopian, the facility will generate a considerable amount of foreign exchange and create job opportunities for more than 100 people.

Arash Noshari, managing director of ACM aerospace, said his company was looking forward to setting up a very strong partnership with the Ethiopian Airlines Group; one that could grow together with aircraft interior products made in Ethiopia.

The aerospace manufacturing company would be a subsidiary company of the Ethiopian Aviation Group, which now has eight profit centres.

The group will transform into a holding company comprising nine subsidiary companies including aerospace manufacturing, Ethiopian International Airlines, Ethiopian Express (regional airline), cargo and logistics, catering, MRO, aviation academy, Ethiopian Airports, ground-handling, and hotel and tour.

Tasew said: “We want to do the same as Morocco, Tunisia, and South Africa are doing.”



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Fly-away winner: the Inmarsat team celebrate the 400th install of Jet ConneX at NBAA.



HONEYWELL'S X FACTOR ON THE RIGHT WAVELENGTH

Honeywell is offering a new speedy JetWave installation service in South Africa. Steve Nichols reports.

Honeywell is now able to offer its JetWave in-flight connectivity system for business aircraft through its authorised service centre, ExecuJet South Africa.

It says a full “fly away” turnkey system installation can be completed in less than 15 days. The package is also available through Jet Aviation, Geneva.

Honeywell says this represents a significant reduction in the aircraft downtime needed to install Inmarsat’s next-generation Ka-band connectivity solution. Customers no longer need to wait for a C-check or other planned maintenance events before upgrading.

Stephen Alcock, senior director business and general aviation, Honeywell Aerospace, said: “The introduction of the fast ‘fly away’ JetWave installations brings a ready-to-go option to business aviation users when upgrading their connectivity hardware. These installations are available for several business jet platforms.”

The Honeywell JetWave hardware, which includes a lightweight parabolic tail-mount antenna, works with Inmarsat’s Jet ConneX business aviation in-flight connectivity service to deliver near worldwide coverage.



The lightweight JetWave system is offered exclusively from Honeywell. As well as the tail-mount antenna, the system consists of three other major components – an antenna controller to accurately point the antenna to the satellite, a radio frequency (RF) unit, and a modem.

Supplemental type certificates (STCs) are available for more than 40 aircraft types, including models from Gulfstream, Bombardier, Dassault and Embraer. The list is growing constantly.

A larger fuselage-mounted JetWave antenna is also available for bigger VVIP aircraft such as the Airbus A310, A319, A320, A321, A330 and A340 or Boeing B737, B747, B757, B767 and B787. This includes ACJ and BBJ variants.

The Jet ConneX service is delivered by four, and soon to be five, Inmarsat Global Xpress (GX) satellites providing

coverage up to about plus or minus 80 degrees latitude.

The fifth Global Xpress satellite, constructed by Thales Alenia Space, will boost capacity across the Middle East, Europe and the Indian subcontinent, and is targeted for launch in 2019.

Jet ConneX provides an “on the ground” type internet experience with multi-megabit speeds. This means people can use the in-flight connection to browse the internet, send and receive e-mails, handle video-streaming, voice over internet protocol (VoIP), live TV, file transfer, virtual private network (VPN), videoconferencing and much more.



The Ka-band solution enables them to enjoy much higher volumes of data for a significantly lower price per megabyte.

The megabit (Mbps) speeds, rather than the kilobit (Kbps) speeds delivered by older technologies such as SwiftBroadband, means users get an experience more like the one they expect in their office.

JetWave and Jet ConneX together deliver high-speed Wi-Fi that’s 10x faster than Inmarsat’s older SwiftBroadband service – even over oceans. Honeywell and Inmarsat guarantee connection speeds though a committed information rate (CIR) of between 1.5Mbps and 6Mbps, depending on the service package chosen.

Typically, users commit to a data package that supplies between 25 and 95 gigabytes of data a month. They also select the maximum upload/download speeds they want.

At the US-based NBAA show in Orlando, Florida in October, Inmarsat announced that Jet ConneX had already been installed and activated on 400 business jets worldwide.

The milestone was reached less than 24 months since Jet ConneX entered commercial service, highlighting its rapid uptake across the world.

Christine Lawson, director business aviation, Inmarsat, said: “The fact that 400 customers have installed Jet ConneX in such a short space of time is a major endorsement of the service from customers.”

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There's a new era in air support opening up to the humanitarian community in Africa. David Oliver reports.

Mission possible: taking aid to a new level...

The United Nations (UN) spends close to \$8 billion and the European Union (EU) another \$1.6bn every year on peacekeeping around the world, with the bulk going to missions in Africa.

One of the largest costs of these operations is the leasing of transport aircraft to provide airlift of supplies in emergency operations and the support of peacekeeping missions. Between them, their air operations cover more than 250 destinations in Africa alone.

Analysing the usage of aircraft types and air operators deployed enables the organisations to quantify and optimise air operations effectively. This includes measuring various performance indicators for individual routes, aircraft, and operations as a whole.

The majority of aircraft used by organisations on humanitarian support missions are reliable twin-turboprop civil commuter airliners, while, for heavy lift of cargo, including food and medical supplies, the Russian Il-76 is the aircraft of choice.



Designed originally as a military freighter, the four-jet Il-76 can carry up to 40 tonnes of cargo.

Now, however, for the first time, the Airbus C-295 military transport aircraft is about to be operated by a commercial company that is a leading provider of humanitarian support operations in Africa – based at Wilson Airport in Nairobi, Kenya.

Wilson has served commercial charter companies, flying schools and private pilots for more than 70 years, and is the second busiest airfield in Africa in terms of aircraft movements.

Although domestic flights constitute most of the total traffic from the airport, it is the main base for several air ambulance and humanitarian aid operators, the largest of which is DAC Aviation, which was founded by Emmanuel Anassis, who identified an opportunity in the African humanitarian air transportation market.

Stellwagen Group's order for 12 Airbus C-295W transport aircraft was the first sale of a military aircraft to a leasing company by Airbus Defence & Space. PICTURE: AIRBUS.



Anassis had begun his commercial aviation career in 1984 and had a broad range of experience, from scheduled airline operations to critical airlift missions in war-torn countries.

Working as a humanitarian pilot in east Africa, he noticed that international humanitarian aid organisations were lacking access to a stable, reliable and safe air service provider.

In response to this market need, DAC began operations in 1993 with a single DHC-5 Buffalo aircraft and a contract with the United Nations Children's Fund (UNICEF). By 2004, the fleet had grown to seven aircraft, by which time the company had acquired the first of many Dash 8 aircraft.

The 37-seat Series 102 and 200 aircraft have a 3,400kg payload, while the 54-passenger Dash 8 Series 315 can carry an increased payload of 5,135kg.

The Dash 8-315 models operated by DAC are equipped with a gravel kit supplement, which permits them to land and take off on gravel runways, as well as rough terrain. The aircraft are also equipped with an auxiliary power unit (APU), allowing for air conditioning systems to operate while on the ground.

In August 2006, DAC acquired CMC Aviation, rebranded as DAC Aviation (EA) Limited, a long-standing MRO facility located at Wilson Airport.

The objective was to expand the organisation's fixed-base operations (FBO) there.

DAC Aviation has contracted to operate the European Commission Humanitarian Aid & Civil Protection (ECHO) Flight, which is an essential humanitarian partner supporting the majority of aid agencies operating in and around the Great Lakes and African Horn regions.

This EU-funded operation permits the transportation of personnel and supplies to remote areas, which, without the service, would have few links outside of Africa.



Supporting more than 80 scheduled flights a week, the ECHO Flight programme continues to grow in its capacity and ability to help an increasing number of non-governmental organisations (NGOs) access the necessary transportation required to fulfil their mission objectives.

With an estimated operating cost of more than \$18.6 million in 2017, ECHO flight transported 26,100 passengers and some 195 tonnes of cargo.

It also contributed more than \$22 million to the World Food Programme's dedicated United Nations Humanitarian Air Service (UNHAS), the world's largest humanitarian airline, which operates in Sudan, South Sudan, Chad,



ECHO Flight's Dash 8 aircraft operate from austere landing strips in remote areas of east Africa.
PICTURE: DAC AVIATION.

Inset: One of two ECHO Flight Dash 8 Series 102s at DAC Aviation's facility at Nairobi's Wilson Airport.
PICTURE: DAVID OLIVER.

Mauritania, Niger, Nigeria, Mali, Yemen, Ethiopia, Cameroon, and the Central African Republic.

UNHAS carried an average of 25,042 passengers, 218 tonnes of cargo and undertook 95 evacuation flights per month in 2017.

DAC Aviation aircraft contracted to UNHAS, which supports more than 100 NGOs, with seven aircraft.

Within Kenya, UNHAS provides air transport services to 34 NGOs engaged in humanitarian operations at the Dadaab and Kakuma refugee camps.

On DAC Aviation's 20th anniversary of operating humanitarian aid, a second CRJ 200 LR was added to the fleet, together with six new Cessna Grand Caravan EXs, and the first of three 78-seat Dash 8 Q400s with a payload of 8,670kg – all operating in support of humanitarian aid and relief programmes.

In June 2017, Canadian aviation financier and lessor, Stellwagen, signed a firm order for 12 Airbus C-295W medium transport aircraft with 12 options to open up new markets for the military aircraft. The agreement positioned Stellwagen to address civil markets, including the humanitarian sector, freight operators in austere environments, and government agencies such as search-and-rescue services.

Stellwagen CEO, Douglas Brennan, said: "The C-295 is a remarkably capable and versatile aircraft. We have intensively studied the potential for its use in all civilian and humanitarian operations and we look forward to working with Airbus and operators throughout the world."

At the end of 2017, the Stellwagen Group signed an agreement to lease four Airbus C-295 aircraft to DAC Aviation International, which planned to begin humanitarian operations with two aircraft in the first quarter of 2018 operating in Africa.



Emmanuel Anassis, chairman of DAC Aviation, said: "We greatly appreciate this opportunity and partnership with our friends from Stellwagen. Introducing the Airbus C-295 and its tremendous capabilities into our operations will significantly enhance our mission, allowing us to take our 25 years of humanitarian assistance to the next level as we continue to deliver hope to those less fortunate.

"This partnership allows the humanitarian missions to safely operate the new, multiple-use aircraft in austere African environments and immediately provides a new standard of relief services to people in peril."

Built at Airbus Defence & Space's facility at Seville in Spain, the twin-turboprop C-295 is a nine-tonne capacity, ramp-equipped, medium transport aircraft capable of carrying 80 passengers over a range of 1,500km.

It is fully certified and routinely operates day and night in combat missions in all weather extremes, from desert to maritime environments, from extreme hot to extreme cold temperatures.

The C-295 is ideal for any kind of humanitarian mission, with outstanding low-level flight and short take-off and landing characteristics from unprepared rough, soft and short airstrips. It also has a flying endurance of up to 11 hours. In-service with 28 operators in 25 countries, more than 200 of the tactical airlifter have been ordered by military customers.

DAC Aviation pilots, including Anassis, have undergone flight training at the Airbus Defence & Space International Training Centre in Seville, both on its CAE C-295 full-flight simulator (FFS) and on the aircraft itself.

The in-service date slipped to September due to lengthy civil certification process of the hitherto military aircraft. Having gained European Aviation Safety Agency (EASA) certification, the aircraft has had to be certified by the Kenyan Civil Aviation Authority before DAC could operate it from Wilson Airport. ■

Johan Pauwels

Marcelle Nethersole speaks to the regional vice president Africa and France Airline Business Group at Hahn Air.



1

■ Can you tell me a little about Hahn Air?

Hahn Air supports airlines – regardless of their size and business model – in taking their indirect distribution to a global level.

An airline wanting to sell its tickets through travel agencies worldwide is met with many challenges. Depending on what its target markets are, it needs to secure availability in various global distribution systems (GDSs) and join numerous billing and settlement plans (BSPs).

In addition, it needs to establish processes for money repatriation and travel agent support, while at the same time controlling the risk of fraud. All of this is complex and costly.

Hahn Air has been specialising in providing distribution services for other airlines. It is a member of almost all BSPs and connects with all major GDSs. It also specialises in money repatriation, as well as risk and fraud management.

Airlines can take advantage of Hahn Air's infrastructure and sell their flights on the HR-169 ticket through 100,000 travel agencies worldwide.

2

■ What other services do you provide?

While distribution services for other airlines are our predominant business area, we also operate scheduled flights connecting Düsseldorf (DUS) and Luxembourg (LUX). In addition, we operate premium executive charter flights. Our fleet consists of three state-of-the-art business jets, one Cessna Citation CJ4 and two Cessna Citation Sovereigns.

3

■ Can you tell me about your African operations?

Our office in Johannesburg is one of 12 global offices that offer dedicated support to travel agencies within the region.

In addition, we also have 12 services partners within the region. They all provide training and presentations about the Hahn Air products, support travel agents with ticketing questions and organise joint marketing activities.

Our office in Casablanca also specialises in issues of money repatriation and preventing fraud. We have five of these offices worldwide.

4

■ Who are your customers within Africa?

Hahn Air's customers include legacy carriers, such as Ethiopian Airlines, South African Airways, and Royal Air Maroc; smaller carriers, such as Africa World Airlines, Air Cote d'Ivoire, and Asky; low-cost carriers, such as Fastjet and Fly Safair; as well as dynamic start-ups like Air Senegal SA, and National Airways of Ethiopia.

In addition, even the smallest airlines, such as the safari airline, Safarilink, are partnering with us.

We have the distinct advantage that we offer tailor-made solutions to any kind of airline and are able to significantly contribute to their business success and growth.

5

■ How do you see the future of travel in Africa?

With the launch of the single African air transport market (SAATM) many barriers will disappear in the very near future. Connectivity will drastically increase in the coming years and will bring economic and social growth to the continent and the individual countries.

At the same time, several African countries have now implemented a "visa upon arrival" for African nationals, which makes travel even more accessible and convenient, thus creating business and tourism opportunities.

Hahn Air will support its airline partners with its distribution solutions and contribute to their business growth. I am extremely optimistic about the future.

6

■ What does a typical day involve for you?

Every day is different and brings new challenges. Working with all the different carriers from the African continent remains a passion and I face every day with a big smile.

The part of my job I enjoy the most are the daily contacts with our customers, and, together with our team in Dreieich, Germany, I try to provide them with solutions, leads and top-of-the-crop customer service.

I have the pleasure of travelling all around Africa to regularly meet with our customers and I also attend the major conferences.

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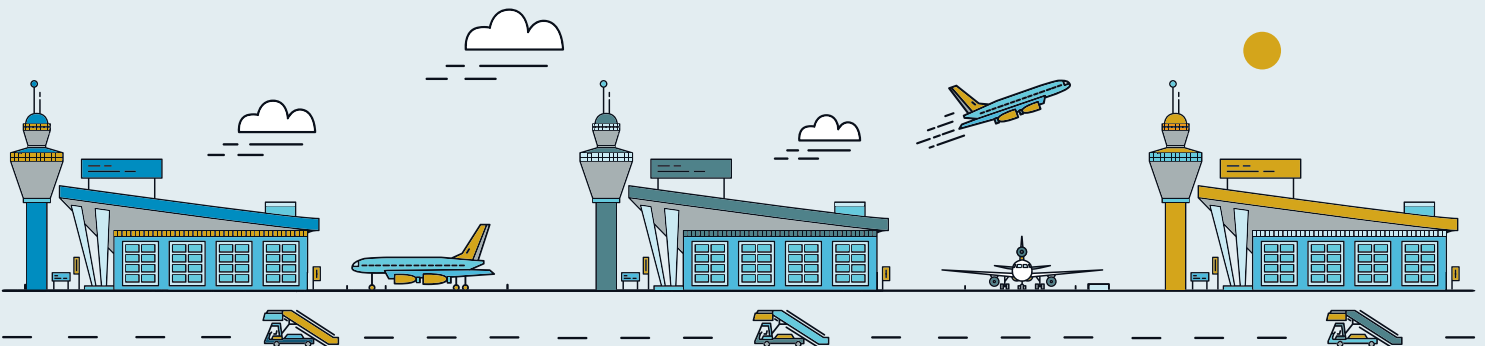


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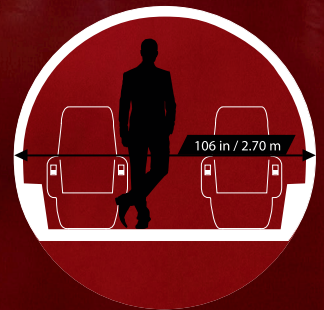
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