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THE MAGAZINE FOR AEROSPACE PROFESSIONALS IN AFRICA

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THE NEW FACE OF SOMALIA

«LE NOUVEAU VISAGE DE LA SOMALIE»

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Why Generation Y will make the difference

If peace and tranquillity were to descend on Africa, just imagine what could be achieved in a few short years!

In the whole Middle East and Africa region only the Gulf states are currently able to have high confidence in a peaceful and prosperous future, because of unwavering attention to stability, harmony, security, investment and so many things that are lacking in other parts of the region.

It is hard to point a finger to the “wrongdoer” in some conflicts as things get complex and confused, and there are myriad opinions. And, as experience has shown, backing one side may not have the desired outcome and in most cases in recent times has resulted in greater instability.

But with terrorism being the main scourge now affecting Africa, almost everyone but the terrorists themselves – and their shadowy, cowardly backers – find their actions abhorrent.

In the last issue of *African Aerospace* we covered the French-assisted effort to control Boko Haram in northern Nigeria. In this issue we report from Mogadishu, Somalia and the Congo. In the former case, journalist Martin Rivers and photographer Ian Billinghurst braved Mogadishu to sound out the country’s transport minister and speak with the UN mission there.

We also spoke to Kenya Airways, where terrorists from Somalia detonating bombs and killing innocent victims have tainted a prosperous future. The whole country – and the surrounding region – is suffering economically.

Overlaid on this, to make matters worse, is the



ongoing Ebola crisis. The fight goes on and, while we look in this issue at the insurance aspects, we also discuss the effects of the virus on medevac operations.

It is almost impossible to estimate the cost of terrorism and disease to African economies. Yet, in the people there is resilient optimism. The young are increasingly looking beyond the roadblocks, through the lens of the internet and social media. They want to follow the rest of the world, the Dubais and the Singapores, into security and prosperity.

Surely it will only be a matter of time until the balance shifts and terrorists lose out to the ambition of youth. It won’t be random military endeavour that envelopes and extinguishes violent criminals, it will be the rise of Africa’s Generation Y.

Ian Sheppard
Editor

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COVER: Somali Transport Minister, Said Korshel. Picture: Billypix.

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«L'AHRLAC : premier avion 'made in Africa'.»

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«Belle prestation de Bell Helicopter en Afrique qui souhaite augmenter la vente de ses nouveaux modèles commerciaux.»

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«Le nouveau terminal T1A opérationnel cette année après l'incendie de l'aéroport de Nairobi en 2013.»

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Aviation Africa 2015 gets strong support

Aviation Africa 2015, the launch event organised by *Arabian Aerospace* and *African Aerospace* magazines, is garnering strong support from the aviation industry.

The African Airlines Association (AFRAA) is a strong supporter of the event. Secretary general Elijah Chingosho said: "AFRAA appreciates the good work that African Aerospace is doing to enhance knowledge of the various developments taking place on the continent and its professional coverage of our events. We value our partnership and are keen to see it growing."

Aviation Africa 2015 has been launched to change the perception of African aviation. Speakers will include airline leaders, government ministers and the heads of civil aviation authorities.

The event will take place on May 10-11 this year in Dubai, UAE.



Algerian flight school picks a Diamond

Algerian flight academy Aviation Training School (ATS) has launched its business with a DA40 NG from Diamond Aircraft, with an option for further expansion in 2015.

This is the first Diamond aircraft to operate in Algeria.

An ATS representative said the aircraft was smooth in flight, offered comfort, panoramic visibility and the powerful Garmin G1000 integrated flight instrument system that provided a pilot with helpful information combined with solid performance.

Kenya takes second B737-800

Kenya Airways has received a second B737-800 Next Generation aircraft.

Group managing director and CEO, Mbuvi Ngunze, said that besides bestowing the pride of having the youngest fleet in the continent, the aircraft

boasts state-of-the-art features, including fuel efficiency.

He said: "This aircraft adds to Kenya Airways' new modern, fuel-efficient and economical portfolio of commercial jets. It will, alongside our other aircraft, contribute significantly towards reducing our operation costs. Cost

containment remains a critical area of focus for the business at the moment."

Sabre's cutting edge agreement

South African Airways and Sabre Corporation have signed a new multi-year agreement to make the carrier's airfares and inventory available on the

Sabre global distribution system.

The agreement provides Sabre travel agencies and corporations globally with access to the airline's full range of fares, schedules and availability, including published fares sold through the airline's own website and reservations offices.

Spartan choice for Chad

The Republic of Chad has taken delivery of the second of a pair of Alenia Aermacchi C-27J Spartan transport aircraft.

The type is now in service, augmenting or replacing the single examples of the ageing Lockheed C-130E (captured from Libya) and Antonov An-26 that previously comprised the whole of the Force Aérienne Tchadienne (Chadian Air Force) tactical transport fleet. The status of a second An-26 is uncertain.

The aircraft will be based at the capital's N'Djamena International Airport, alongside a handful of helicopters and the combat element of three MiG-29s and six Su-25s supplied by Ukraine.



Proflight Zambia strikes silver for safety

Proflight Zambia has achieved silver status under the internationally-recognised basic aviation risk standard (BARS) audit system, paving the way for achieving the International Air Transport Association (IATA) operational safety audit (IOSA) certification.

The award comes after the airline passed a series of rigorous international aviation safety audits, conducted over the past four years by BARS.

Proflight is the only Zambian airline to have been awarded the silver basic risk standard by the Flight Safety Foundation, which provides a global industry benchmark for airline safety.

"Safety is the number one priority for Proflight Zambia, and continued recognition of this by international inspectors reinforces our position as Zambia's leading aviation company," said Proflight's Chitalu Kabalika.

"The standard is a measure of how seriously we take safety and how much we are prepared to invest in order to ensure international safety standards are met. It also demonstrates that safety is part of Proflight's everyday activities and we do not cut corners," he added.

Proflight undergoes, on average, five external safety audits every year, including two by the Zambia Civil Aviation Authority and usually three by international safety organisations, such as the Flight Safety Foundation, he said.

Angola and Emirates in deal

Angola's national carrier, TAAG, is to work with Dubai-based Emirates airline to develop a "world class" carrier to compete with major African and international airlines.

The Dubai airline signed a management concession agreement, which will see Emirates take a role in the management of TAAG, which has the Angolan Government as a majority shareholder.

The 10-year agreement lays the foundation for both airlines to jointly leverage commercial opportunities in Africa and beyond.

Niger jet causes a storm

The République du Niger has taken delivery of a second-hand Boeing 737-700BBJ as a presidential jet at a reported cost of \$40 million.

The announcement by Defence Minister Karidjo Mahamadou generated a storm of controversy in the impoverished west African nation.

Jettainer welcomes ECAir

Jettainer is taking over the supervision and maintenance of containers and pallets for Equatorial



Second base for FlySafair

FlySafair has launched its second base at Johannesburg OR Tambo Airport, allowing passengers to fly from Johannesburg to George and Port Elizabeth.

"Our intention has always been to grow our schedule of operations and it makes most sense for us to open a second base and connect all of our current destinations, therefore offering flights from Johannesburg as well as from Cape Town," said Lorna Terblanche, FlySafair's vice president of passenger services.

"Further, we have had overwhelming feedback from our passengers to introduce these routes, we have listened to their suggestions and we have great pleasure in being able to now offer these routes."

Congo Airlines (ECAir).

The airline is Jettainer's first client on the African continent.

In 2014, Jettainer acquired new clients Jet Airways and American Airlines in the Indian and Asian region, as well as the US.

"We operate on a global scale and still see high potential for further growth, especially in the

Asian market.

"The recent developments show that airlines around the world are convinced by our innovative complete service for unit load devices (ULDs)," said Jettainer MD Carsten Hernig.

Ethiopian secures financing loan

Ethiopian Airlines has secured a \$41.4 million seven-year junior loan facility from ING Capital LLC for the acquisition of two Boeing 777 freighter aircraft.

The senior debt is supported by Ex-Im Bank and was provided by another financial institution with ING as its co-arranger.

The junior lender

benefits from a second priority interest in the security package, which secures both the Ex-Im Bank and junior loan financing.

Ethiopian Airlines utilises the junior loan facility to finance a portion of the net purchase price of the aircraft, which is not supported by Ex-Im Bank.

ING Capital was the sole arranger and lender of the junior loan financing and will also act as the agent throughout the term of the transaction.

Xian MA-60 for Djibouti

The Republic of Djibouti has received a Xian MA-60 twin turboprop transport, which it has put into service in the VIP, personnel transport and cargo transport roles. According to some sources, the aircraft will be the first of a pair of MA-60s for the Djibouti Air Force.

The MA60 is a stretched version of the Xian Y7-200A, which was, in turn, a Chinese derivative of the Ukrainian Antonov An-24.

The commander of the Djibouti Air Force, lieutenant colonel Wahib Moussa Kalinleh said: "The acquisition of this equipment is timely as the DAF is experiencing difficulties in transporting logistics for the benefit of our contingent deployed in Somalia in line with the African Union's peace mission."

Air Algeria confirms triple A330 order

Air Algeria has ordered three Airbus A330-200s, according to the latest numbers released by the European manufacturer.

The agreement helped take Airbus's gross order total to 1,077 aircraft by the end of the third quarter, with a net of 791.

Of the airframer's long-haul lines, only the A330 increased its order count in September.

Charles Brewer: MD DHL Express for Sub-Saharan Africa.



SMEs failing to see opportunities in Africa

According to an in-depth study conducted by the Economist Intelligence Unit (EIU) on behalf of DHL Express, approximately 40% of global small and medium-sized enterprises (SMEs) do not perceive Africa as a growth opportunity, despite the positive economic growth stories and growing middle class in the regions.

The report further reveals that while many multinationals and state-owned companies are actively taking advantage of the opportunities that Africa offers, SMEs still remain apprehensive and are choosing to trade with other emerging markets instead.



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Ethiopian is best again

Ethiopian Airlines was named as African Airline of the Year by the African Airlines Association (AFRAA) at its 46th Annual General Assembly (AGA) in Algiers in November.

Ethiopian was crowned for its exceptional results in 2013, consistent profitability, and sound strategy, which has enabled it to forge win-win partnerships with fellow African airlines.

This is the third year in a row that Ethiopian has received the award from AFRAA.

AFRAA 2015 heads for Brazzaville

The African Airlines Association (AFRAA) will hold its 47th Annual General Assembly (AGA) in the Republic of the Congo, hosted by local carrier ECAir.

Airline CEO Fatima Beyina-Houssa said: "ECAir is honoured and humbled to be chosen by our association to host the 47th AFRAA AGA."

"We are happy to welcome you next year to Brazzaville and are looking forward to giving you a taste of central Africa while discussing challenges faced by our industry."

Ethiopian has a yen for Japan

Ethiopian Airlines and ANA, Japan's leading airline group, signed a codeshare agreement in October.

Ethiopian Airlines Group CEO, Tewolde Gebremariam, said: "Our codeshare partnership will give customers travelling between Africa and Japan the best possible connectivity options with



GrandNew addition to Uganda police fleet

The Uganda National Police Air Wing is to take delivery of an AgustaWestland GrandNew helicopter in addition to the widely reported Polish-built PZL W-3A Sokol, which was announced at the Farnborough International Airshow last July.

The purchase of the two helicopters from the Finmeccanica subsidiaries also includes a training and support package, under which six Ugandan pilots are already undergoing training to fly the new helicopters. ☒☒

The GrandNew is classed as a light twin and has a maximum

take-off weight of 7,000lb. It can carry up to seven passengers.

Powered by a pair of 735shp Pratt & Whitney PWC207C engines, the aircraft has a maximum cruising speed of 168kts and a range of 464nm.

The W-3A Sokol is an intermediate twin-engined helicopter, with a maximum take-off weight of 14,110lb, carrying up to 12 passengers. Powered by two 900shp PZL-10W turboshaft engines, the Sokol has a maximum cruising speed of 129kts and a range of 402nm.

one ticket and one single check-in at first boarding airport. It will also play a critical role in enabling greater people-to-people, investment, trade and tourism ties between a rising Africa, the second fastest growing region in the world, and a highly industrialised Japan, the third largest economy in the world."

MEBAA Morocco set for September

The Middle East and North Africa Business Aviation Association (MEBAA) is hosting its first dedicated event for North Africa, the MEBAA Morocco show, in September 2015.

Ali Al Naqbi, founding chairman of MEBAA, said: "Morocco represents an attractive investment market, with growing wealth, strong macroeconomic policies, and lower cost bases for business aviation players."

"We see enormous opportunities, and are keen to promote our aims

of ensuring a well-supported, regulated and safe business aviation sector in North Africa."

To be held at Casablanca's Mohammed V International Airport, the two-day outdoor event will feature a static display area, and around 30 exhibitors plus 25 aircraft.

Ethiopian receives fourth B777 freighter

Ethiopian Airlines has received its fourth B777-200 LR freighter.

The aircraft, which has exceptional uplift, range and fuel efficiency, is perfectly suited for the transport of Africa's growing import and export freight.

In line with the country's plan to enhance the export of horticulture and floriculture products and the airline's vision 2025 strategic road map, Ethiopian is not only expanding its fleet capacity and cargo terminal but also replacing its old aircraft with the latest environmentally friendly aircraft with large capacity.



Sierra Leone signs open skies with UAE

Sierra Leone signed an open skies agreement in October with the United Arab Emirates (UAE).

The memorandum of understanding allows full flexibility on the routes, capacity, number of frequencies and types of aircraft, in any type of service (passenger or cargo).

The agreement also includes the exercise of fifth freedom traffic rights. In addition, both parties agreed to allow unrestricted non-scheduled/charter operations between the two countries.

First flight for new Airbus helicopter

Airbus Helicopters' newest lightweight military multi-role helicopter, the EC645 T2 (LUH SOF), successfully completed its first flight in November.

The German Armed Forces has ordered 15 of the first of this new helicopter type.

The EC645 T2 is the military version of the civil EC145 T2. It has a maximum take-off weight of 3.7 tonnes and can be used for a wide range of military operations, including transportation, reconnaissance, search and rescue, fire support, and evacuation of wounded personnel.

Giants make way for Black Hawks

The Tunisian Air Force's HH-3E Jolly Green Giant helicopters (pictured) are set to be replaced by 12 Sikorsky S70 Black Hawks – but it remains unclear whether these will be donated or sold to Tunisia by the USA.

The Defense Security Cooperation Agency (DSCA) notification for the sale of the 12 Black Hawks to the Government of Tunisia identified these as UH-60M helicopters in standard US Army configuration. The UH-60M is an updated version of the UH-60L, with improved design wide-chord rotor blades, 2,000shp T700-GE-701D engines, a more durable gearbox, an integrated vehicle management systems (IVHMS) computer, and a new glass cockpit.

Boeing is green for go

Boeing's ecoDemonstrator 787 has begun flight-testing more than 25 new

technologies aimed at improving aviation's environmental performance through every phase of flight.

The ecoDemonstrator programme accelerates the testing, refinement and use of new technologies and methods that can improve efficiency and reduce noise.

This new round of testing, using 787 Dreamliner ZA004, will evaluate software and connectivity technologies related to operational efficiency; remote sensors to reduce wiring; aerodynamic and flight control improvements for greater fuel efficiency, and icephobic wing coatings to reduce ice accumulation.

PAS signs for second CRJ900

Bombardier Commercial Aircraft has announced that Petroleum Air Services (PAS) of Cairo, Egypt, has signed a firm purchase agreement to acquire a CRJ900 NextGen regional jet.

"When we purchased our first CRJ900 NextGen aircraft we were seeking a proven jet aircraft to



Ethiopia strengthens with Hercules

The Ethiopian Air Force has acquired an ex-USAFC-130E, which has now entered service with No15 Squadron at Harar Meda Airport, Debre Zeit.

Ethiopia's military transport fleet has been heavily engaged in transporting equipment for international forces fighting Islamist militants

in Somalia and so the US agreed to provide a replacement for a Hercules that had been lost.

The aircraft selected for transfer to Ethiopia was a C-130E that had formerly served with the Puerto Rico ANG's 198th Airlift Squadron before being stored in the Arizona desert at Davis Monthan with 22,739 flying hours recorded.

enhance services to our customers and for our tourism destinations," said General Yehia Hussein, chairman and managing director, PAS. "The CRJ900 has delivered exactly what we were seeking and is performing

very well in the harsh environmental conditions that are typical in Africa. It is also delivering outstanding fuel efficiency and reliability, so we are purchasing another to further expand our operations."

ExecuJet expands maintenance

ExecuJet Aviation Group is expanding heavy maintenance support at the company's Cape Town International Airport MRO facility to include Bombardier Dash 8 Q100, Q400 as well as the CRJ100 and CRJ200 aircraft.

ExecuJet has also received South African Civil Aviation Authority (SACAA) approval to maintain these aircraft.

Graeme Duckworth, president MRO services said: "The market share for Bombardier's regional fleet is increasing and there is a growing need to provide operators with a facility capable of performing heavy maintenance on these aircraft types.

"Our goal is to allow regional airlines to concentrate on their line operations, while we focus on deep-level maintenance matters, such as C-checks."



Ethiopian academy selects turbo-diesel

Ethiopian Airlines Aviation Academy is equipping its training fleet of Cessna 172 Skyhawk piston aircraft with the latest 155hp turbo-diesel aero-engines from Continental Motors.

The new CD-155 engines will replace avgas-burning Lycoming engines that are made in the German plant of Continental Motors. The engines will be installed by Africair, an accredited Centurion diesel master installation centre.

DHL invests in new SA facilities

DHL has investments totalling €30.5million (\$38m) from its supply chain and global forwarding divisions in South Africa. The investments signal the group's long-term growth plans for the region as it brings state-of-the-art infrastructure, IT systems and world-class services to support businesses operating in Africa.

The company has launched two new facilities at Plumbago, close to the OR Tambo International Airport, east of Johannesburg.

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LOVE WHAT YOU FLY



Commercial Aviation

Liberalisation was the topic on everyone's lips at the African Airlines Association (AFRAA) 2014 annual general assembly (AGA), held in Algiers in November. Tom Pleasant reports.



Liberal supporters look to build a coalition...

«La libéralisation toujours au coeur des débats » – Page 16

While there were a few subdued delegates, and even some notable absences, most came to AFRAA with a spring in their step over their successes and voicing a new optimism in the industry.

The assembly was opened by the Honourable Ammar Ghoul, Algeria's minister of transport who, in a passionate keynote speech, called on African airlines to forge strong partnerships between themselves to develop intra-African networks. This was essential, he said, to combat increasing competition from non-African airlines.

To that end, he said, the Government of Algeria was supporting Air Algérie in its plan to develop its African network, to include destinations such as Chad, Djibouti, Ethiopia and South Africa.

Dr Elijah Chingosho, AFRAA's secretary general, followed, saying: "Connecting Africa through aviation and other transport infrastructure is critical to integration and intra-African trade, as well as to tourism, economic growth and development. Air transport is an important creator of jobs and critical skills."

Welcoming delegates to the AGA, Mohamed



Mohamed Salah Boulouf: "African airlines can successfully intensify intra-African connectivity as long as they commit to implementing policies for free and voluntary cooperation among themselves."

Salah Boulouf, CEO of Air Algérie, expressed confidence in the development of intra-African air transport, saying: "African airlines can successfully intensify intra-African connectivity as long as they commit to implementing policies for free and voluntary cooperation among themselves."

IATA's vice president, Middle East and Africa, Hussein Dabbas, talked about how the damaging effects of a lack of connectivity have been increasingly understood by African governments. "One of aviation's greatest potential markets is Africa," Dabbas said. He cited research that showed how aviation liberalisation in just 12 African countries would provide an additional 155,000 jobs and \$1.3 billion in annual GDP.

With the on-going Ebola epidemic in west Africa leading many within Europe and the US to mistakenly believe travel to anywhere in Africa is a danger, Ethiopian Airlines CEO, Tewolde Gebremariam, made an excellent point. He said: "Unfortunately, Africa is perceived as single country, and yet those countries most highly affected are, in fact, closer to Europe than east Africa!"

Dr Elham Mahmoud
Ahmed Ibrahim:
there has been
significant progress
on the YD over the
past year.



Ammar Ghoul: African airlines must forge strong partnerships between themselves to develop intra-African networks.

Is Yamoussoukro finally the answer... three decades on?

There is renewed hope that the red tape handicapping efficient African aviation will be cut in 2015.

The fresh optimism for the future of African aviation at the 2014 AFRAA Annual General Assembly (AGA) was due to many things – rising traffic, greater aircraft orders and expanding networks, among others.

The most significant issue, though, was the news that the long-delayed Yamoussoukro Decision (YD) was finally gathering momentum again.

The YD has been dismissed as wishful thinking, as an attempt to unite African states' air transport networks when none wanted to be united. After all, it was all the way back in 1988 that a group of those states met in Yamoussoukro (Côte d'Ivoire) and agreed that intra-African air transport liberalisation would be positive for the continent, a consensus which became known as the Yamoussoukro Declaration. Agreeing on how that should happen and then implementing it took a little longer.

Fast forward to 1999, when African civil aviation ministers went further and turned the declaration into the Yamoussoukro Decision. In 2002, after two years of negotiation, 44 heads of state committed their countries to deregulating access, capacity, frequency and tariffs within their air spaces. And then... nothing.

More than 20 years later and Africa's skies remain heavily regulated and protectionist, with intra-African flights typically requiring lengthy detours via Europe, the Middle East, or even the US.

When the African Union's commissioner for infrastructure and energy, HE Dr Elham Mahmoud Ahmed Ibrahim, in her speech at the AGA, explained how there had been significant progress on the YD over the past year, it was easy for people to assume it was simply more empty words.

But, as the details emerged and other stakeholders confirmed the news, a frisson of interest began that soon turned to excitement. If this was true, delegates said, it could herald something very special. To free the aviation industry from the handicaps of over-regulation would revolutionise how it could operate and guarantee more efficient and, therefore, more successful operations.

Ibrahim explained how, in collaboration with AFRAA and the African Civil Aviation Commission (AFCAC – the AU agency responsible for implementing the YD), the AU had recently completed the regulatory and

Many speakers reiterated the importance of continuing flights to affected countries and stressed that only a tiny fraction of points within the region currently had any services shut down.

There was also much discussion over the successes of AFRAA's joint fuel-purchase programme, which has saved the member airlines taking part millions of dollars. With the model showing such success, AFRAA revealed there were also talks taking place to organise a similar deal for ground handling.

Finally, it was announced that the 47th AGA would be held from November 1-3 2015 in Brazzaville, the Republic of Congo. It will be hosted by ECAir, whose CEO, Fatima Beyina-Moussa, was elected the 2015 president of AFRAA.

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institutional groundwork for the YD. When the AU meets this month for its 25th summit, the chairperson of its executive commission is personally pushing the YD front and centre of the talks between the heads of state.

With no further obstacles to its implementation, and plenty of recent success stories to show the benefits of healthy aviation, all concerned say they are confident it will be ratified and put into practice early next year.

A driving force behind this recent push is AFCAC's secretary general, Iyabo Sosina. She explained how this dusty policy has come back to life and what it means for aviation and Africa as a whole.

"There is growing momentum behind the YD at the moment," she said. "It started last year after I went to give a presentation at a forum. I got talking to the International Air Transport Association (IATA) while I was there and we found we were talking the same language over liberalisation. I told them: 'Look, give me the figures and data and I'll take them to the AU's ministers.'

"So, I went to the AU to push the YD agenda. Luckily, the deputy chairperson embraced it and then so did the chairperson herself, Nkosazana Dlamini-Zuma. She had also realised that aviation could push the trade agenda and help the integration of Africa. As the chairperson of the AU's Commission, she carries a lot of weight and has really been pushing us all to work together."

Even with Dlamini-Zuma backing the policy, there would still be resistance from the individual



Iyabo Sosina: driving force.

states when it would come to actually implementing the recommendations. This was largely due, Sosina said, to the AU not having installed the regulatory and organisational procedures needed to support the YD. These included detailed rules on competition, dispute-resolution processes and a comprehensive agreement on passenger rights.

"They weren't perfect," she admitted, "but we worked on them and the states all sat down and finally validated them last year"

What was true for the guiding documents was also true for the YD itself, she suggested: "A lot of people have found flaws in YD, but there is no law that is ever perfect right away. That's why YD is absolutely fine as a basic law. We will just have to keep refining it."

Sosina also believes the world's recent economic troubles have created the foundation for greater

cooperation between airlines. "In the past, I believe some airlines were reluctant to implement YD because they still had this idea that they would die in an open market and so the state needed to protect them. But things have got to a stage where they have been protected and they are still dying."

But the reason why the AU is suddenly willing to push the YD so persistently is the impact it can have on other, similar multilateral agreements.

"We have this vision that YD will be taken outside of transport," said Sosina. "For a long time it hasn't worked because the larger African society does not know the inherent benefits of the agreement. But now, with more people travelling – and wanting to travel – by air, they can see the services are not there for the efficient movement of people and goods, and that intra-African connections are a real problem.

"It also helps that a lot of younger people today never experienced colonialism," she added. "There was that tendency in the past for most African countries to move towards their colonial masters, but all the younger people know now is how we have been managing ourselves recently, even if we have sometimes been making a mess of it.

"More and more they are starting to see Africa coming into its own. It is starting to work together as a group to intervene when there are problems without necessarily depending on the outside world to come in first," she said. "We have to help ourselves. That is why the salvation of Africa depends on YD."

SOMMAIRE

La libéralisation toujours cœur des débats

La libéralisation a été le sujet clé de l'assemblée générale de l'Association des compagnies aériennes africaines (AFRAA) 2014, tenue à Alger en novembre dernier. Un compte-rendu de Tom Pleasant

La plupart des délégués ont mis en exergue leurs réussites et exprimé leur optimisme dans l'industrie. Dans son discours inaugural, Ammar Ghoul, le ministre algérien du transport, a appelé les compagnies aériennes africaines à forger des partenariats solides pour développer des réseaux intra-africains. C'est essentiel pour lutter contre la concurrence croissante des compagnies aériennes non-africaines.

La connectivité a été évoquée par les principaux intervenants. Ainsi, le Dr. Elijah Chingosho, secrétaire général de l'AFRAA, a souligné la nécessité de connecter l'Afrique grâce à l'aviation et d'autres infrastructures du transport. L'intégration et le commerce intra-africain, le tourisme, la croissance économique et le développement en dépendent.

Mohamed Salah Boulouf, PDG d'Air Algérie, a pour sa part ajouté que pour cela, les compagnies aériennes africaines doivent appliquer des politiques communes de coopération.

Selon le directeur régional, Moyen-Orient et Afrique de l'IATA, Hussein Dabbas, l'Afrique est l'un des marchés les plus prometteurs du transport aérien. Selon des études, la libéralisation du secteur dans seulement 12 pays africains créerait 155 000 emplois supplémentaires et 1,3 milliards de dollars en PIB annuellement.

Au sujet de l'épidémie d'Ebola, le PDG d'Ethiopian Airlines, Tewolde Gebremariam, a souligné que «

malheureusement, l'Afrique est perçue comme un seul pays ». Plusieurs intervenants souhaitent le maintien des vols vers les pays concernés.

La 47e AGA se tiendra en novembre 2015 à Brazzaville sous l'égide d'ECAir et la présidence de Fatima Beyina-Moussa, son PDG.

■ ENFIN LA LIBÉRALISATION ?

Les hauts responsables de l'Union africaine ont révélé l'imminence de la libéralisation de l'espace aérien africain en 2015 lors de la 46e assemblée générale annuelle (AGA) de l'AFRAA à Alger de l'an dernier.

Cette annonce a ravivé l'optimisme des acteurs du transport aérien au même titre que la croissance du trafic, la hausse des commandes d'avions et les réseaux en expansion.

La libéralisation du transport intra-africain remonte à 1988 à l'initiative d'un groupe d'états africains réunis à Yamoussoukro (Côte d'Ivoire). En 1999, la Déclaration fut transformée en Décision. Après deux ans de négociations, 44 chefs d'état engagèrent leur pays en matière de libéralisation, de capacité, de fréquences et des tarifs au sein de leur espace aérien.

Or, plus de 20 ans plus tard, le ciel africain reste fortement réglementé et protectionniste, avec des vols intra-africains nécessitant généralement de longs détours via l'Europe, le Moyen-Orient, ou même aux États-Unis.

L'annonce des progrès significatifs sur la YD, par le commissaire de l'UA pour les infrastructures et l'énergie, le Dr Elham Mahmoud Ahmed Ibrahim, a été appuyée par plusieurs intervenants à l'AGA.

Le Dr. Ibrahim a expliqué que l'UA a récemment terminé les travaux réglementaires et institutionnels pour la mise en œuvre de la YD en collaboration avec l'AFRAA et l'AFCAC. Le président de la commission exécutive de l'UA compte personnellement mettre la YD au centre des pourparlers entre les chefs d'état lors de son 25e sommet prévu en janvier 2015. De ce fait, les parties concernées sont confiantes de la ratification et de l'application de la YD au début de l'année prochaine.

La force motrice derrière cette récente montée en puissance est La secrétaire général de l'AFCAC, Iyabo Sosina, y a contribué positivement. Elle a expliqué à African Aerospace comment cette politique poussièreuse a été ravivée et ce qu'elle signifie pour l'aviation et l'Afrique dans son ensemble. Il faut montrer l'importance de la libéralisation aérienne pour le commerce et l'intégration en Afrique.

Pour l'UA il est urgent de faire avancer la YD car son application impactera sur d'autres accords multilatéraux similaires.

« Nous devons nous aider mutuellement. C'est pourquoi le salut de l'Afrique dépend de la YD. »



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Kenya Airways' new CEO, Mbuvi Ngunze, talks to Tom Pleasant about taking over from his old boss, the current turbulent times, and future prospects for the airline.

Ngunze steps out of the shadows



Mbuvi Ngunze holds a Bachelor of Commerce degree from the University of Nairobi. He is a chartered accountant (England and Wales) and is also a graduate of the Harvard Business School's Management Development Program. He has previously worked at Price Waterhouse, Bamburi Cement, Hima Cement Uganda, and Lafarge. Mr Ngunze joined Kenya Airways in September 2011 as chief operating officer.

Kenya Airways' (KQ) new CEO, Mbuvi Ngunze, must be tired of the world reminding him he has a tough job following his old boss, Titus Naikuni.

Naikuni was CEO for 11 years and, during his tenure, he doubled KQ's size, making it Africa's third-largest airline.

However, for the last few years of his reign, external challenges started to take the shine from those achievements: the fire at KQ's hub, Jomo Kenyatta International Airport (JKIA); the Eurozone crisis; the Ebola outbreak in west Africa; and violence from Islamist militants within Kenya itself.

All of these had an impact on and continue to affect passenger numbers and network routings that have, in turn, lead to financial losses, falling share values and increasing dissatisfaction from customers and shareholders.

Speaking at the recent African Airlines Association (AFRAA) annual meeting in Algiers, Ngunze said: "Naturally, whenever you're going into a new position, you'll feel a little nervous. There's a lot of learning to do."

Asked how his management style would differ from Naikuni's, Ngunze said with a smile: "Well, we'll just have to find out about that. Give it time."

A chartered accountant, Ngunze joined KQ in September 2011 as chief operating officer (COO), having held several senior executive positions in subsidiaries of French multinational Lafarge.

He takes over at a turbulent time. For the first half of the 2014-2015 financial year, KQ recorded a turnover of \$629.49 million, up 4.5% from the same period the year before. That still wasn't enough to stop the airline making an operating loss of \$55.87 million though, compared with a \$19.17 million profit recorded in the same period the previous year.

In addition to currency and fuel hedging problems, the loss was largely due to overvaluing the Boeing 767s that the airline wanted to sell. It originally planned to replace the 767s with new 787 Dreamliners, but Boeing's infamous production delays meant KQ had to hold on to the old aircraft for longer than intended. Now that six of the nine Dreamliners on order

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have arrived, the 767s have been flagged for sale again. Unfortunately, their true value (net carrying value) was subsequently realised to be more than their potential future revenues and terminal value, knocking a painful (and no doubt embarrassing) \$59.86 million impairment off KQ's books.

That also raises the worrying possibility that KQ's other aircraft are also overvalued, which would be another financial time bomb waiting to go off when they, too, come to be sold. Having already been stung with currency and fuel hedging, the situation puts serious doubt at the doors of KQ's finance department.

These were contributing factors to KQ's shares falling 20% to \$0.08 this year, the lowest level since 2003. It was a performance that also meant the airline was unable to pay a dividend for the first time in 14 years. Ngunze was only in his new job for a couple of weeks before he was at the annual investors' meeting and on the receiving end of angry KQ shareholders demanding solutions.



It's not all bad news though, and the shareholders' complaints are a little unfair. First of all, after a poor performance recently, Kenya's economy, which contributes about 20% of KQ's profit, is finally on the upswing.

"Our exposure to Kenya is significant," Ngunze said, "so it means that if Kenya's fortunes turn, ours will also turn. My target is to find a way to narrow the loss."

The national economy grew 5.8% in the three months through June, compared with 4.4% a quarter earlier. Kenya is also closely tied to Europe's fortunes, which are also recovering. Both revivals have boosted KQ's sales 5% in the six months ending September to \$629.71 million.

On top of that, KQ is now entering its third year of the 10-year Mawingu transformation project, which focuses on fleet and network development.

"If you want to eat an elephant, you've got to eat it in pieces," said Ngunze. "It's the same with developing a large company. When Mawingu was launched in 2011, the ambition was very clearly a 10-year plan.

"From a fleet point of view, we have delivered the aircraft we promised we would: the 777-300, the Embraer narrow-bodies for regional destinations, and now six of the nine 787s we ordered. Those six will replace the 767s we retired and the next three will be for growth."

Those new fuel-efficient aircraft, KQ is predicting, will contribute to a \$99.77 million fuel saving, aided by falling crude oil prices. They have already added 8.18 billion available seat kilometres (ASK) of capacity, a 15.2% growth against the prior year. Passenger uptake increased 5.2% to 5.23 billion revenue passenger kilometres (RPK), although the yield achieved per RPK fell 5.6%.

"If you want to eat an elephant, you've got to eat it in pieces. It's the same with developing a large company."

MBUVI NGUNZE



New lounges boost Kenya's facilities

Kenya Airways has unveiled two new passenger lounges at its dedicated Terminal 1A, Jomo Kenyatta International Airport, Nairobi.

The Simba Lounge and Pride Lounge are for the exclusive use of Premier World passengers, flying from or transiting through Kenya Airways' JKIA hub. The lounges will also be used by Sky Priority passengers from the airline's SkyTeam partners.

Both Simba and Pride Lounges, situated on the second floor of Terminal 1A, are spacious and their designs are contemporary African themed. Their state-of-the-art facilities will offer comfort and enhanced connectivity to guests.

Nonetheless, the total passenger-related revenues improved 3% (up to K\$14.41 million) compared with the previous year.

Capacity into Europe grew with the introduction of the new 400-seater 777-300 into Amsterdam, replacing the 777-200, and with the Dreamliner starting into Paris with 18 more seats than the old 767-300. Capacity into the Middle East and Asia grew 20%, again thanks to the replacement of the old fleet with newer aircraft.



Within Africa, capacity grew by 11%, mainly on KQ's key feeder routes to Harare (Zimbabwe), Johannesburg (South Africa), Kinshasa (DRC), Lagos (Nigeria), Lilongwe (Malawi) and Lusaka (Zambia). Further growth was spurred by increased frequencies to the larger east African catchment areas, such as Bujumbura (Burundi), Dar-es-Salaam (Tanzania), Entebbe (Central Uganda) and Kigali (Rwanda).

Increased capacity also allowed KQ to work on Mawingu's network development. "Because of the turbulence we have experienced with security and travel advisories in east and west Africa, we are behind our plan," admitted Ngunze. "We have to first focus on delivering the [immediate] results... and only then look to the long term.

"There are a couple of things you have to remember about these delays," he added. "Number one, KQ only has two destinations affected in west Africa. We are still flying to Abidjan (Ivory Coast), Abuja (Nigeria), Accra (Ghana), Bamako (Mali), Dakar (Senegal) and Lagos. Even without us, the wider African aviation industry still has a lot of transport going to the region.

That's the first message that's very important.

"The second thing is, while it is true that Ebola is a concern for air transport, we have gone through other medical concerns –

SARS, H5N1 – and come out of them intact. In that context, we just have to buckle in. There will be a downturn on some routes but, in the long term, there is a lot of positivity in African aviation."

Handicapping development of the industry, though, is how non-African airlines, in particular from the Middle East, are poaching skilled African workers right at the time when the African airlines need them. Ngunze chooses to view this as a compliment. "All the Middle Eastern carriers are recruiting people from Africa. Why? Because of our heart," he said. "It's about service and the warmth you naturally get from Africans, which ultimately is what the customer is paying for."

Optimism was certainly present at AFRAA, where there was a very real sense that, after years of talking about cooperation, it was actually starting to happen, and importantly, that it could be financially rewarding.

"It's very easy to be pessimistic but I'm optimistic about all of the engagement going on," said Ngunze. "AFRAA's joint fuel-purchase programme saved the member airlines millions of dollars. There is now a similar joint ground-handling project also out for tender and that will come to fruition soon. Work optimisation is happening, which will further help cooperation between the airlines."

An area of unexpected good news at the conference was that the Yamoussoukro Declaration to liberalise African skies was, after years of inaction, suddenly moving again.

"I have only been in the aviation industry three years but I can already see the improvements happening," said Ngunze. "The African Union is now really driving the Yamoussoukro Declaration. We need that, because at the moment when we operate in the competition's home market, we effectively have one hand tied behind our back, be it restrictions into markets or infrastructural challenges. Step by step, though, we are getting there."

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ECAir CEO Fatima Beyina-Houssa is the new African Airlines Association (AFRAA) president for 2015, taking over from Air Algerie boss Mohamed Salah Boultif. It means that this November's AFRAA Annual General Assembly (AGA) will be hosted by the new president in Brazzaville, Republic of the Congo. Tom Pleasant caught up with her late last year to discuss her new role and her airline.

My hopes to ease travel in Africa

Q Congratulations on your appointment, especially as ECAir only launched in 2011 and joined the association in 2012. You must be very excited about your new role?

A ECAir is honoured and humbled to be chosen by our association to host the 47th AFRAA AGA in Brazzaville, at centre of the beautiful Republic of Congo. We are looking forward to giving people a taste of central Africa, while discussing the challenges faced by our industry.

Q AGA 2014 seemed to have been a bit more realistic than previous years. Will there be more of this in the coming year?

A Yes, I am optimistic. I came to my first AGA in 2011. In 2012 ECAir became an AFRAA member and, at the end of 2012, ECAir joined the executive committee.

I have been to lots of AFRAA meetings. In the beginning the projects were all talk, but now they are really happening. For example, there is a joint fuel purchase project and a route coordination project. It's all becoming real.

We are a part of all these projects. The price of fuel in Africa is very high but, with this joint fuel purchase project, we can buy fuel together at certain airports in Africa and other parts of the world. We sit together and coordinate our routes and schedules to make life easier for African passengers. That is the ultimate goal of everything we are doing now, to make it as easy to travel in Africa as it is in other parts of the world.

That's not the case yet, but we are getting there and I feel AFRAA is really implementing projects to bring us together. Words are good, but actions are even better and we can see some action now.

Q ECAir seems to be doing very well. How was 2014 for you?

A Things are okay. As you say, it's going in the right direction.

For the airline, 2014 was all about Dubai. We

started our first direct flights between Brazzaville and Dubai in March. That was quite historic for our country, because it has never had a direct link with the Middle East – it had only been connected with Africa and Europe – so doing that was quite a challenge. We succeeded and we were very happy with that.

Also, 2014 was the year when we started increasing the size of our fleet. For a long time we had three aircraft. Then, at the end of 2013, we added a fourth one – a Boeing 757-200. Now, at the end of 2014, we are up to seven aircraft.

We now have a 767-300, two 757-200s, two 737-700s and two 737-300s. That is the size of our fleet. Our ambition now is to go regional, to open up stations in Africa.

Q What are your plans for 2015?

A In 2015, we will link Brazzaville with Libreville in Gabon, Yaoundé in Cameroon, Bamako in Mali, Dakar in Senegal, Luanda in Angola, N'Djamena in Chad and Bangui in the Central African Republic. This will be achieved because the fleet has now reached a size where we can do all of that. We are just finishing our traffic rights negotiations and so on, but everything is in place for us to be able to have all those destinations in early 2015.

Q I've heard word that you may be taking some Boeing 787 Dreamliners too.

A Yes. You know about that? My preference would be to talk about that in a year, because then I will be ready to tell you what we're going to do with them. Let's wait a little bit.

Q What other big projects are you looking at?

A I don't know if we will be able to do it by the end of 2015, but we would like to have flights to China, to open up our country even more. The central African region is not that

open. To get around, you need to go to other parts of Africa, or travel intercontinentally. We don't want that. We want you to be able to sit on an aircraft in Brazzaville and be able to get to the Middle East and Asia. That is really our ambition but I am not sure that we will be able to realise that in 2015.

We are working hard to put all these things together, to create a real hub in Brazzaville. It will initially be a regional hub, but then we want to open new routes to the world.

Q When you launched, you had a partnership with Swiss airline PrivatAir. Is that still active?

A Yes, PrivatAir is one of our partners. We have an aircraft, crew, maintenance and insurance (ACMI wet lease) contract with them on some of our aircraft.

We also have other partners we work with, to help us train our staff, because that was the big challenge when we started and it's still a challenge right now.

Airlines require highly specialised jobs and, when you start an airline in Africa, the problem is that people don't always have the expertise for that. In other parts of Africa, at least they have a tradition of airline. In our part of Africa, we were members of Air Afrique for a long time, but it is 10 years since Air Afrique disappeared and all the people are now retired.

We have young people, who are really dynamic and have all the energy, but they are not trained to work in the aviation business. We had to take all these young people, train them and three years down the road we are happy with the results. Many of them are very good, especially our cabin crew, who go through international training in Frankfurt and Malta. We work a lot with PrivatAir on that.

Now we can say that we have international cabin crew, who could work for any airline, anywhere in the world. We're very proud of that. We are also training young pilots.



‘That is the ultimate goal of everything we are doing now, to make it as easy to travel in Africa as it is in other parts of the world.’

Q Are you also looking to train engineers and mechanics?

A We have also started that. It hasn’t picked up yet, because you need partners to train technical staff, but it’s coming; it’s definitely in our plans to have Congolese technical experts. We have also trained booking agents and finance staff, because working for an airline is so specific.

Even if you’re very good, it is hard to be good at something if you haven’t got any training or experience in this field. We have to train them, otherwise we wouldn’t be working with Congolese people at all and that would be a shame for the national airline of Congo.

Q If you could send some advice to yourself, back when you were originally working on the plans to launch the airline, what would it be?

A Going backwards, I think we would have planned our fleet strategy in much more detail and started training before the airline even opened.

Aircraft are difficult to find on the market, and to buy, lease and fund, and it’s not that easy to bring all these things together. I would have gone into much more detailed preparation and then maybe things would have unfolded in the way I planned.

When you start, you have so many hurdles, so many obstacles. People don’t even realise how difficult it is to set up an airline and if I’d anticipated some of those obstacles a bit earlier, it would have run better. But you can’t anticipate everything.

At least we are lucky to have the airport infrastructure that we need. We have a very modern airport and its management company is a joint venture between the Congolese state and a European company, so they know how to run airports. That is good for us. We also have a handler, a caterer; all the basics are there. It needs some fine-tuning; we still have a lot to do.

Nouvelair, compagnie aérienne privée de loisir, a su trouver une clientèle touristique souhaitant visiter la Tunisie en famille ou entre amis. Elle a traversé de multiples turbulences mais a acquis après 25 ans d'existence, une certaine maturité. Une enquête de Vincent Chappard.

Nouvelle ère d'ambition pour Nouvelair...

Nouvelair est aujourd'hui un groupe solide offrant à une clientèle touristique et individuelle, des vols de qualité et au meilleur coût entre l'Europe et la Tunisie.

Nouvelair doit sa réussite avant tout à la mise en œuvre de partenariats avec les plus importants groupes du tourisme dans le monde. Elle coopère aussi avec les plus grands tour-opérateurs spécialistes de la Tunisie dont Marmara, Thomas Cook ou encore Wold of TUI. Nouvelair place également des avions auprès de compagnies tierces.

Son réseau s'étend essentiellement sur Europe. Nouvelair dessert également l'Autriche, la Biélorussie, le Danemark, la Finlande, la Norvège, la Russie, la Suède, la Suisse ou encore la Turquie.

« Nouvelair a réussi à fidéliser une clientèle méditerranéenne et scandinave », souligne Imen Kaabi, directrice marketing de Nouvelair.



Sa flotte est composée de 11 Airbus A320 et la compagnie a obtenu l'agrément IOSA en septembre 2007.

Elle a réalisé un chiffre d'affaires de 380 millions d'euros en 2013.

La compagnie a transporté 1,2 millions de passagers. Si l'on regarde attentivement les chiffres, on constate que Nouvelair a connu une forte croissance du nombre de passagers transportés entre 2002 et 2007 pour atteindre un pic de 2,505 millions. Elle a ensuite connu

une forte chute pour descendre à 1,014 millions de passagers en 2011.

L'année 2015 sera l'année de tous les challenges pour Nouvelair.

« Face à une conjoncture économique et touristique délicate, Nouvelair est tenue d'améliorer sa qualité de service et d'élargir la gamme de son offre », ajoute Imen Kaabi.

Cet élargissement comprend non seulement l'ouverture de nouvelles routes régulières sur des marchés classiques comme la France, l'Allemagne et la Russie mais également sur de nouveaux marchés en Europe de l'Est et en Asie.

L'amélioration de l'expérience des passagers à bord constitue également un axe de développement stratégique de Nouvelair qui propose des services innovants - choix et réservation de sièges, choix du menu, l'accès au lounge - accessibles en ligne.

Hussein Dabbas, directeur régional pour le Moyen-Orient et l'Afrique du Nord de l'IATA, a partagé sa vision sur la mutation du transport aérien en Tunisie avec Vincent Chappard.

La stabilité, maillon clé du transport aérien en Tunisie



Quelle est l'analyse de l'IATA sur le marché du transport aérien en Tunisie après les troubles politiques de 2010 ?

Avant les événements survenus au printemps 2010, la Tunisie était une destination très dynamique pour le tourisme en général. Il y avait beaucoup de vols vers et hors de la Tunisie avec un trafic important en provenance de l'Europe que

ce soit pour le business ou le tourisme.

Pendant les changements de gouvernement, beaucoup de passagers et de touristes se sont détournés de la Tunisie. Je suis convaincu qu'avec le retour de la stabilité politique dans le pays, le marché va croître de nouveau. Le gouvernement tunisien et les autorités en charge du tourisme travaillent sans relâche pour ramener ces passagers vers la Tunisie. Ce n'est guère une tâche facile. Les touristes sont maintenant très sensibles aux problèmes politiques et économiques et à la stabilité des pays qu'ils projettent de visiter. Le marché tunisien revient lentement mais sûrement vers son niveau de 2009 et 2010.

Que peut apporter à la Tunisie un accord de ciel ouvert avec l'Union européenne ?

Je pense que la notion de ciel ouvert est parfois sortie de son véritable contexte. Il faut avant tout se focaliser sur la libéralisation du trafic aérien entre les pays. L'Opensky évoque beaucoup de choses pour des pays qui ne peuvent pas y accéder rapidement parce qu'ils ne disposent pas de compagnies assez solides pour déployer un réseau domestique.

La politique de libéralisation du transport aérien que prône l'IATA vise à aider ces pays à travailler avec d'autres pour ensuite développer et stimuler leurs marchés.

Il y a beaucoup d'accords de ciel ouvert que ce soit en Afrique (en particulier au Maroc), aux Etats-Unis ou en Europe. Les compagnies aériennes ne vont cependant pas desservir un pays s'il n'y a pas une demande ou un trafic suffisant ou si elles ne peuvent pas elles-mêmes créer cette demande, qu'il y ait ou non un accord de ciel ouvert.

La libéralisation du transport aérien en Tunisie est-elle réalisable ?

L'IATA milite pour la libéralisation du transport aérien et je pense que cela se fera tôt ou tard. Beaucoup de pays

africains ne disposent pas d'accords entre eux alors qu'ils en ont presque systématiquement avec les Etats-Unis ou l'Europe. Il est impératif de travailler sur cette problématique afin de développer ce potentiel et le trafic entre les pays africains. Il y a par exemple 17 vols par semaine entre Nairobi et Londres alors qu'il n'existe qu'un vol entre Nairobi et Dakar.

Quelles sont les principaux défis qui guettent la Tunisie pour stimuler la croissance de son transport aérien ?

Nous pensons que la Tunisie devrait davantage libérer le potentiel de son marché aérien. Le pays dispose d'un bon trafic avec l'Europe et en particulier la France dont plusieurs destinations sont desservies.

Tunisair est également une compagnie aérienne solide et elle doit désormais affronter la concurrence avec d'autres transporteurs.

L'ouverture du marché va générer plus de passagers pour la Tunisie, pour les compagnies aériennes et les vols domestiques. La stabilité politique d'un pays reste toutefois un point capital car elle a un impact considérable sur le trafic aérien. Les passagers évitent toujours les pays instables, quel que soit les actions menées (de promotion et de marketing) par les autorités en charge du tourisme.



Les compagnies aériennes doivent s'adapter à l'évolution de l'industrie touristique, à la crise et aux mutations économiques mondiales. Ces dernières engendrent souvent une saturation des marchés traditionnels européens, une montée en puissance de certains pays d'Asie et une valorisation du potentiel de plus en plus affirmé de l'Afrique. De nombreuses compagnies africaines et de l'océan Indien ouvrent ainsi de nouvelles destinations ou augmentent leurs fréquences vers l'Asie et l'Afrique pour capter de nouvelles opportunités de croissance.



Selon Imen Kaabi, l'Afrique est évidemment un marché potentiel et prometteur pour Nouvelair.

« Nous étudions actuellement l'ouverture de lignes régulières sur l'Afrique du Nord et sur d'autres pays africains à moyen terme », souligne Imen Kaabi.

Ces opportunités existent réellement sur le continent africain. L'IATA a publié un rapport en juillet 2014 indiquant les avantages sociaux et économiques considérables découlant de la libéralisation des services aériens à l'intérieur de l'Afrique. L'association a passé en revue les opportunités offertes par 12 pays africains (dont la Tunisie), s'ils appliquaient la Décision de Yamoussoukro. Cela pourrait stimuler le marché de l'emploi de même que le développement économique avec la création de 8100 emplois et l'augmentation du PIB de 113,7 millions d'euros.

Face aux nouveaux défis qui guettent la Tunisie, Nouvelair compte s'affirmer, forte de son expérience et de sa maturité, pour accompagner la reprise du trafic.



Prêt pour le décollage: Nouvelair équipe et le pilote.

SUMMARY

Stability the key for Tunisia aviation industry

Hussein Dabbas, IATA regional director for the Middle East and North Africa, shared his vision of the transformation of air transport in Tunisia. He said that before the spring of 2010, Tunisia was a vibrant destination for tourism in general. There were lots of flights to and from Tunisia, with significant traffic from Europe, whether for business or tourism.

During the change of government, many passengers and tourists turned away from Tunisia. Dabbas believes that, with the return of political stability in the country, the market will grow again.

The Tunisian Government, and the authorities in charge of tourism, work tirelessly to bring in passengers but this is no easy task, he said. Tourists are now very sensitive to political and economic problems and stability of the countries they plan to visit. The Tunisian market is, nevertheless, returning slowly but surely towards its level of 2009-10.

Can Tunisia secure an open skies agreement with the European Union? "I think the concept of open sky is sometimes out of its proper context," said Dabbas. "We must

first focus on the liberalisation of air traffic between the countries. The open sky evokes many things for countries that cannot access them quickly because they do not have strong enough companies to deploy a home network."

The policy of liberalisation of air transport, advocated IATA, aims to help these countries to work with others and develop and stimulate their markets. The airlines were not going to serve a country if there was no demand or enough traffic or if they could not themselves create this situation, whether or not an open skies agreement.

What are the main challenges facing Tunisia to stimulate growth in air travel?

"We believe that Tunisia should further unleash the potential of the aviation market," said Dabbas. "However, the political stability of a country remains a major point that always has a significant impact on air traffic. Passengers always avoid countries without stability, whatever the actions (promotion and marketing) by the authorities in charge of tourism."



The Evolution Of The Customer Experience: Why Customer-Centric Airlines Will Lead The Market

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AFRICA'S MISSING LINK...

For many years, travellers flying between two African points have had to connect through an inconvenient hub – sometimes as distant as Paris. New Zimbabwe-based low-cost carrier Flyafrica wants to improve that situation, as Alan Dron discovered.

Low-cost carriers (LCCs) have made a major impact on most of the world's continents. Following the pattern of Southwest Airlines in the US, budget carriers in Europe, Asia and even the Middle East – where it was popularly believed that travellers would equate low prices with low quality and shun budget airlines – have opened up new horizons to millions of people.

Africa has been the exception. Legacy carriers have continued to be the dominant force and the price of flights has remained high.

At last, budget airlines are starting to appear. Like London buses, you wait ages for one, then two come along simultaneously.

Both FastJet and Flyafrica plan to create individual airlines in several countries, using local partners, but linking them via a single reservation system and coordinated marketing. However, FastJet acquired an existing business based across several countries to make use of the AOCs, while Flyafrica is setting up from scratch.

For many years, African travellers have complained that, to fly between two points in the continent, they often have to make ludicrously long connection flights – frequently through Paris.

“Africa is dominated by three major players, South African Airways, Kenya Airways and Ethiopian Airlines. Their whole desire is to bring people through their hubs. If you're going from Dakar-Cotonou, you're going through Addis Ababa,” said Flyafrica CEO Adrian Hamilton-Manns.

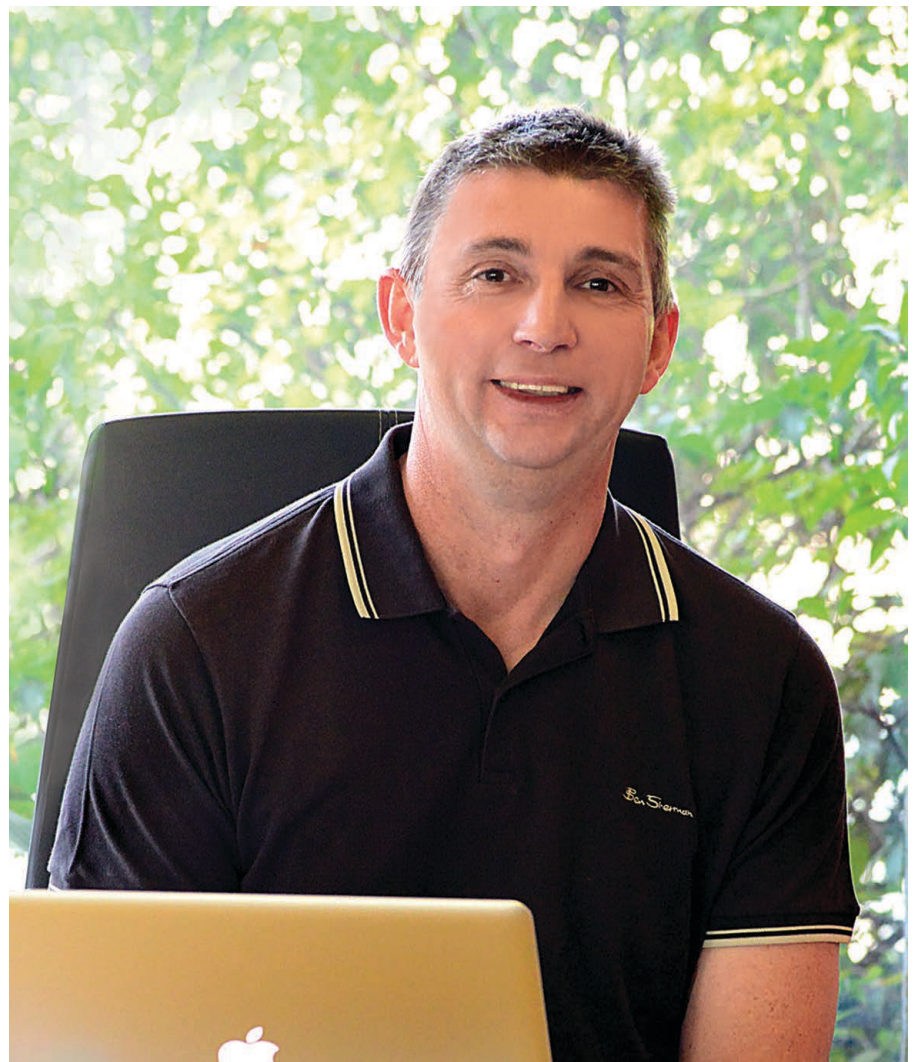
“To Ethiopian's credit, they started up Asky and they use it to access ECOWAS [the Economic Union of West African States]. Everyone else has gone for a hub that is in southern or eastern Africa.”

Under Flyafrica's operating model, that will change, said Hamilton-Manns.

“We want to get you from one spot in Africa to any other spot with a maximum of two stops, probably one, and that will be only a slight deviation from your chosen path.

“For example, if you're flying from Cairo

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Flyafrica CEO Adrian Hamilton-Manns worked for a decade to get his project off the ground.

CONTINUED FROM PAGE 27

to Cape Town, you would probably do that through somewhere like Libreville [Gabon].”

The other difference that Flyafrica intends to institute is serving points on its network daily, not just a few times a week, in order to make the service more viable for business travellers.

Flyafrica will start its operational life with five Boeing 737-500s, formerly owned by Czech Republic flag-carrier CSA.

The smallest member of the 737 Classic range is not normal equipment for LCCs, but Hamilton-Manns believes it is ideal for Flyafrica’s initial requirements.

Most LCCs start with Boeing 737-300s with 140-150 seats – and, indeed, Flyafrica is in negotiations to buy 10 examples of that model, which are readily available in the marketplace for reasonable prices. However, the smaller-capacity 737-500 is seen as a better bet with which to start new routes.

The 737-500s will fly in a 120-seat, all-economy layout. However, Flyafrica retains the capability of using the front of the cabin for business-class passengers by folding down the back of the centre seat in a row of three to create more space between the remaining two places and creating what is effectively a European-style short-haul business-class cabin. In this configuration, the 737-500 will have a 12 plus 102 layout.

Despite the business-class option – plus access to lounges if passengers want to pay for them – Flyafrica is not one of the emerging breed of hybrid airlines, insisted Hamilton-Manns. “We’re a very low-cost carrier. Our costs are crazy low. Fuel is well over 50% of our entire cost base, which is something I’m very proud of.”

The 737-500s are in excellent condition: “They’re low-cycle, low-hours, sequential MSNs and have been impeccably maintained.” They are also technically identical, which eases maintenance requirements.



As a LCC, Flyafrica will allow one 7kg bag to be taken into the cabin free, but will charge for any more carry-on items, as well as for checked-in baggage.

It is promising an innovation on reservations: when booking online, once passengers have given the necessary details, such as name and passport number, they will automatically receive a boarding pass with their itinerary, which they print out. The aim is to save money on check-in desks, the staff that are needed to run them and boarding passes.

“We’re the first airline to launch with this. We’ll make a big noise about it when we get the glitches out. That’s the kind of cost-cutting move that enables us to keep our fares down,” enthused Hamilton-Manns.

If anyone turns up at the airport without having



“We’re a very low-cost carrier. Our costs are crazy low. Fuel is well over 50% of our entire cost base, something I’m very proud of.”

**DRIAN
HAMILTON-MANNS**

been able to pre-print their boarding pass, Flyafrica will do it for them, for a charge of \$10.

Hamilton-Manns said that not only would his company offer low fares, it would not impose fuel

surcharges, which he described as “simply double charging by airlines to hide the true cost of travel”.

One reason for the slow appearance of LCCs in Africa has been the conservative nature of local regulators.

This is not peculiar to the continent; in Russia for many years, the regulator would not allow airlines to sell non-refundable tickets and in India there was a bar on charging for checked-in luggage.

African regulators remain not entirely comfortable in dispensing with long-standing rules, but they recognise that the world is changing and they must adapt.

Some aspects of African regulation remain the same, however, notably last-minute requests for additional paperwork.

Flyafrica’s July 23 inaugural service from Johannesburg-Victoria Falls was postponed for a week after the CAA of Zimbabwe revoked the validation of its pilots to fly in Zimbabwe just 12 hours before take-off.

It was, said Hamilton-Manns, a traumatic moment.

“We put our pilots back up there and re-presented our credentials. They did things they

hadn’t had to do since their ab-initio days, such as R/T procedures. The CAA then re-issued the validations. We never got a complete understanding of why it happened.”

Flyafrica aims to have a major new growth plan ready for publication by November. While details of this have not been released, the future shape of the airline has.

Initially there will be four companies operating under the Flyafrica banner, each in a different country. In each country, the airline will link up with a local investor, with that investor holding 51% of the company and Flyafrica Ltd, the private equity aviation investment group of which Hamilton-Manns is the founder, taking the remaining 49% plus a management contract for the local operation. In Zimbabwe, for example, the local investor is infrastructure company nu.



“They will be completely linked,” said Hamilton-Manns. “The best comparison I can give is with McDonalds – although you have local ownership [of a franchise] the burger is the same.

“We have a management team based in Johannesburg with immense years of aviation experience, in both low-cost carriers and established carriers. They will build the processes and procedures, so the different companies will be linked to one reservations platform, with the same global distribution system (GDS), for example. There will be coordination in marketing and distribution.

“They will have multiple air operators’ certificates. It’s identical to the Air Asia system; it

Some of the first passengers to fly with the new Zimbabwe-based carrier disembark at Victoria Falls.



has Air Asia, Air Asia Malaysia, Air Asia Indonesia, etc.”

One potential problem may be finding enough pilots locally for what is due to ramp up into a substantial operation in a fairly short timescale. There are, for example, few available pilots in Zimbabwe with the requisite qualifications. Pilots wanting to work for Flyafrica will have to pay for their own type-rating.

The company will use a mix of online direct sales and GDS providers, but will also make use of travel agents, which retain an important role in many parts of the continent.

New route announcements are imminent: “Some of the points we’re announcing are high-volume and will get the 737-300 right away. Others are almost exploratory in nature,” said Hamilton-Manns.

“In Zimbabwe, the next route will be Harare-Johannesburg.

“But there are ones that nobody has ever flown before, such as Victoria Falls-Cape Town and Victoria Falls-Kilimanjaro. We will also be flying Harare-Beira [Mozambique]. Nobody has ever flown that.”

In late 2014 Flyafrica.com announced that it would start to fly the Johannesburg-Windhoek (Namibia) route from 2 February.

Given Zimbabwe’s economic turmoil and hyperinflation of some years ago, it may seem not the most natural choice of an operating base, but Hamilton-Manns said much had changed in the southern African nation.

With the government having realised that the Zimbabwe dollar had become untenable, the US dollar had effectively become the national currency and stability had returned: “It’s a very good place to do business. The Zimbabweans have been very

CEO with a wealth of experience

Flyafrica CEO Adrian Hamilton-Manns has spent the past 20 years in the airline industry. “I’m from New Zealand and, like all New Zealanders, we like to travel,” he said.

Starting out with Air New Zealand in revenue management, he worked in sales and data analysis with Qatar Airways when the Arabian colossus owned just nine aircraft. Spells with consultants Seabury followed and he eventually moved to Africa to join South African Airways, becoming executive vice-president, commercial.

His experience with low-cost carriers began with Indian carrier IndiGo, which he helped to set up as launch chief commercial officer. A spell back in his native land followed, taking embryonic carrier Pacific Blue from two aircraft to 18; he then put Indonesian carrier Mandala through the local equivalent of Chapter 11.

However, for the past decade, he has slowly been building up a list of investors in an African LCC.

“I’ve been working on this project since 2002-3. When I was previously in Africa, nobody was touching the place. There’s so much potential sitting here, but nobody does very much about it.”

welcoming. They’re very friendly and enthusiastic.”

To help engender confidence in the new airline, it has brought in major international players in fields such as training and heavy maintenance.

Lufthansa Training will be the new airline’s training partner: “All our pilots will go through Lufthansa Training. When they come on board they will do their type-rating, conversions and refresher training through Lufthansa, with which we’ve signed a long-term agreement.”

Heavy maintenance such as C-checks will be handled by Bedek of Israel, with Flyafrica’s own licenced engineers responsible for small defect rectification and A-checks. One future project is to set up an affiliated company, African Aircraft Maintenance, and maintenance facilities will be installed at several points on the route network.



“In some places like Zimbabwe, Air Zimbabwe has very good maintenance facilities, but in Kinshasa, for example, there’s nothing there and no [parts] traceability, so we will have our own mechanisms in place.”

In another example of its efforts to engender credibility in its operations, Flyafrica has signed up with UK-based spares organization AJ Walter to back up its maintenance operation with spares stocks if it does not have a particular part in its own inventory.

In a test-run carried out before the airline opened for business, one of the 737-500s was deemed to require a replacement nosewheel at Victoria Falls. An engineer was dispatched from Johannesburg and the whole procedure was undertaken in less than 24 hours.

Des employés d'Air Madagascar se sont mis en grève récemment à l'aéroport international d'Ivato pour revendiquer entre autres la sortie de la compagnie de l'annexe B de la liste de sûreté de l'Union européenne. Vincent Chappard fait le point sur ces événements ayant paralysé le ciel malgache et mis en lumière les difficultés auxquelles est confrontée la compagnie.

Une rébellion chez Air Madagascar

La liste controversée de sécurité de l'Union européenne (UE) continue de faire débat en Afrique et en particulier à Madagascar. Une partie du personnel au sol d'Air Madagascar a ainsi refusé en août dernier d'assurer l'enregistrement et l'assistance au sol des vols long-courriers des compagnies françaises.

Un avion d'Air France en provenance de Paris a du finalement se poser à l'île de La Réunion. Selon un porte-parole d'Air France, la compagnie déplore ce mouvement d'une minorité des agents qui a conduit à une désorganisation importante de ses opérations entre le 26 et le 30 août, faisant subir d'importants retards à ses clients et occasionnant un préjudice financier significatif. Corsair international a annulé plusieurs vols et a du rapatrier ses passagers. Pour Corsair, ce sont surtout ses clients au départ de France et de Madagascar qui en ont subi les conséquences. « C'est une situation que nous ne pouvons que regretter. »

Dans une courte déclaration à la presse locale, un porte-parole du mouvement de grève a rappelé que cette revendication était motivée par « la sortie d'Air Madagascar de l'annexe B ». Les grévistes ont également accusé « les autorités françaises de

vouloir étouffer Air Madagascar et d'être responsable du maintien de la compagnie dans l'annexe B de la liste de sûreté de l'Union européenne ». Le ministre des Transports malgache, Ulrich Andriantiana, a décidé de mobiliser les forces de l'ordre pour sécuriser l'arrivée des vols internationaux à l'aéroport d'Ivato.

Rappelons que la compagnie Air Madagascar a été mise sur la liste noire de l'UE en 2011 sur un défaut d'exploitation d'un de ses Boeing 767. Ces avions ont été par la suite retirés de sa flotte. Il s'agissait également de vérifier les procédures de contrôle des compagnies malgaches par l'aviation civile de même que la mise en place d'actions et de plans concernant la sécurité des vols d'Air Madagascar.

Au cours de la 21ème mise à jour de cette liste en 2013, l'UE a décidé d'autoriser une partie de la flotte d'Air Madagascar, à savoir dix appareils (3 B737, 4 ATR 72-500 et 3 DHC6-300) à desservir l'Europe. Cette décision lui permettait ainsi de reprendre ses dessertes vers La Réunion et Mayotte, qui font partie de l'Union européenne.

A noter qu'Air Madagascar opère déjà en République Populaire de Chine. L'aviation civile

chinoise a en effet audité la compagnie aérienne avec le concours de l'aviation civile malgache et Air Madagascar. Elle a par la suite autorisé la compagnie à desservir la Chine.

De sérieuses réserves ont été exprimées sur cette liste de sécurité de l'UE et en particulier par le secrétaire général de l'AFRAA même si la sécurité reste au centre des préoccupations de tous. « Cette liste engendre de grandes difficultés économiques et financières et place les compagnies aériennes africaines dans une situation concurrentielle désavantageuse par rapport à leurs homologues européens. »

Il est également pertinent de se demander pourquoi les transporteurs européens desservent des aéroports d'un pays ne disposant pas d'une sécurité optimale. « Si un pays ou un aéroport est dangereux pour les compagnies aériennes africaines, il l'est également pour les transporteurs de l'UE ».

Enfin, le processus de mettre ou d'enlever un pays ou une compagnie aérienne « n'est pas transparent » selon l'AFRAA et « ne constitue pas un indicateur fiable des normes de sécurité d'une compagnie aérienne ». Le caractère unilatéral de la décision d'interdiction suscite aussi de sérieux doutes quant à « son équité et son impartialité ».

Selon des sources proches du dossier à Madagascar, cette sanction envers Air Madagascar impacte fortement ses activités en Europe et cela lui coûte très cher. La compagnie est engagée dans une perte d'exploitation systémique liée au contrat de location (financial lease) avec Air France pour l'avion A340 immatriculé en Europe puis en Islande pour la desserte sur Paris. Air France est également en charge de la maintenance de l'avion.

Ils soutiennent que l'aviation civile malgache avait fait de nombreux efforts durant les deux dernières années. Des efforts, qui selon ces mêmes sources auraient été salués par l'Union européenne. Or, il y aurait eu « un changement radical le 27 février 2014 après la visite de la délégation de l'UE durant la première quinzaine de février 2014 à Madagascar et au moment même où la délégation s'apprêtait à aller défendre son dossier à Bruxelles ».

Depuis, le directeur de l'aviation civile et ses collaborateurs ont été écartés. Un nouveau

SUMMARY

Why Air Madagascar is still 'on the list'

Air Madagascar was originally put on the EU's safety list in 2011 after numerous and repeated safety deficiencies were detected during ramp checks of Boeing 767 aircraft.

The EU was also concerned about the company's ability to implement appropriate corrective and preventive actions and a lack of adequate safety oversight exercised by the Madagascan authorities.

However, in response to repeated requests by the Madagascan civil aviation authority (ACM) and Air Madagascar, the EU Commission, assisted by EASA and experts from member states, carried out a safety assessment visit to Madagascar last year.

During the visit, ACM could not provide evidence of the effectiveness of the corrective and preventive action plan to address the lack of adequate safety oversight of the operations of Air Madagascar. The lack of appropriate qualified resources was said by ACM to be the major root-cause for the failure to correctly implement an appropriate oversight programme.

The EU team also assessed the implementation of the airline's action plan, developed in response to the operational restrictions imposed in 2011, and concerns were raised about airworthiness, showing that improvements were still required in the carrier's procedures.

In addition, the number and the nature of the recommendations that the team had to make to Air Madagascar highlighted the dependence of the carrier on the results of oversight activities by third parties for the continuous improvement of its safety systems.

While the air safety committee acknowledged the improvements achieved by ACM and Air Madagascar, it had to conclude – on the basis of the report of the EU safety assessment visit and the information presented by ACM and Air Madagascar during the hearing – that further improvements were still needed, especially by ACM with regard to its safety oversight.

Interview d'Haja Raelison

Le conseil d'administration d'Air Madagascar a confirmé en novembre dernier la nomination d'Haja Raelison au poste de directeur général de la compagnie. Vincent Chappard a voulu savoir comment il comptait redresser la compagnie.

Q : Quelles sont les actions entreprises par la nouvelle équipe d'Air Madagascar pour sortir de l'Annexe B de la liste de sûreté de l'Union européenne ?

R : Air Madagascar et l'Aviation civile de Madagascar continuent de se coordonner et de mener leurs actions dans le cadre du programme d'amélioration de la qualité et la sécurité. Nous présentons régulièrement les rapports d'étapes réactualisés jusqu'à la prochaine mission d'évaluation de la Commission de Bruxelles qui a été reportée au mois de juin 2015.

Q : Le mouvement social de août dernier a fait ressortir les difficultés opérationnelles et financières auxquelles est confrontée la compagnie. Comment redresser Air Madagascar ?

R : Le redressement passe en priorité par la mise en conformité et l'amélioration continue de la qualité et de la sécurité d'exploitation pour sortir dans les meilleurs délais de l'annexe B de l'Union européenne. Celle-ci pèse considérablement sur notre situation financière et rajoute de lourdes contraintes opérationnelles. Le redressement ne pourra se faire aussi sans la redynamisation de nos ressources humaines et le développement de nos compétences en interne. Air Madagascar veut reconquérir les marchés et repense donc ses services et ses produits. Nous avons un plan de renouvellement et de modernisation de notre flotte afin d'améliorer nos conditions d'exploitation et ainsi pouvoir optimiser nos activités et développer notre offre. Un développement de l'offre qui passe également par l'élargissement de partenariats et d'arrangements commerciaux.

Q : On évoque un partenariat stratégique d'Air Madagascar avec Emirates, pourriez-vous nous en dire plus ?

R : Les coopérations commerciales et de partages de codes seront négociés et privilégiés pour l'extension des réseaux et des services sur les marchés où Air Madagascar n'est pas présente, ne disposant pas d'un nombre d'avions suffisant ou de fréquences de vol. C'est le cas du partenariat que nous avons conclu avec Air Seychelles qui nous permet de relier la destination Seychelles. Cet accord élargit ainsi notre offre dans la région de l'océan Indien et par là même permet un alignement au concept des Iles Vanille.

Q : Des informations circulent concernant le renouvellement des Boeing 737-300 en fin de "leasing". Comment Air Madagascar compte-t-elle étoffer sa flotte d'avions ?

R : L'option des Avro a été étudiée. Même si les études ont démontré que ces avions sont bien adaptés à nos infrastructures à Madagascar, les conditions financières de mise à disposition et d'exploitation sont plus onéreuses. Nous nous dirigeons vers le renforcement de notre flotte dédiée au réseau domestique par des ATR 72-600. Leurs livraisons sont prévues à partir de décembre 2014. Nous avons fait le choix d'une uniformisation de notre flotte, le renouvellement de celle-ci devrait donc aller dans ce sens sur tous les réseaux d'Air Madagascar.

Le redressement ne pourra se faire aussi sans la redynamisation de nos ressources humaines et le développement de nos compétences en interne.
HAJA Raelison



directeur a été nommé. Il s'agit du président d'une société de consultant en matière de sécurité aéronautique qui officie en particulier pour Air Madagascar. Selon certaines sources à Madagascar, il existerait « un sérieux doute sur le contenu du dossier et de la manière dont cette nouvelle équipe l'a défendu et sur quelle base ».

La grève du personnel d'Air Madagascar a eu un autre effet pour le moins inattendu. En effet, les informations financières de la compagnie ont été mises au grand jour. Selon les déclarations d'Ulrich Andriantiana à l'Express de Madagascar et diverses sources syndicales, les caisses de la compagnie accusent un trou abyssal de l'ordre de 100 millions de dollars sans toutefois préciser l'origine d'une telle perte.

Air Madagascar a certes un passé glorieux, 65

années d'existence et d'expériences dans le transport aérien mais elle fonctionne à perte et sous l'emprise de son actionnaire majoritaire, l'état malgache. L'annexe B de la liste de sécurité de l'UE pèse certainement sur la période difficile par laquelle traverse la compagnie, elle n'est toutefois pas la seule cause de des maux qui la gangrène.

Air Madagascar doit impérativement se transformer comme l'ont fait d'autres compagnies de la région comme Air Mauritius, Air Seychelles ou Air Austral et gagner en compétitivité. La sécurité de ses opérations et une gestion financière rigoureuse et transparente doivent être une priorité absolue.

Mais pour cela, tous les acteurs doivent aller dans la même direction.

The landings of

Asia – and China in particular – stands at the crossroads of the explosion of African-Asian trade and investment. Keith Mwanalushi discusses the opportunities and challenges these growing relationships bring to airlines in east and southern Africa.

«Les relations optimistes Afrique-Asie » – Page 34



“Gulf and Middle East carriers have several things working in their favour; the geographic location of their hubs offer both traffic, revenue and cost advantages.”
CARLOS OZORES

Trade between Africa and Asia is continually increasing; China is already the largest trading partner with Africa, surpassing trade with the US by significant margins.

Airline seat capacity between Africa and the Far East grew more than 40% between 2008 and 2013. But between Africa and China alone, capacity more than tripled over that same period. This growth is not showing any signs of slowing, as scheduled non-stop seats between Africa and China are set to grow another 35% in 2014, according to figures from aviation consultants ICF International.

Meanwhile, capacity between Africa and the rest of the Far East was flat between 2008 and 2013, and is set to decrease nearly 15% in 2014. However, China now accounts for 60% of Africa-Far East capacity, up from only 25% in 2008.

The data also shows that eight airlines operate non-stop air services between Africa and China, led by Ethiopian (ET) with 37% of scheduled capacity and South African Airways (SAA) with 14%.

ET serves four destinations from its Addis Ababa hub: Beijing, Guangzhou, Hong Kong, and Shanghai.



As *African Aerospace* was going to press, Kenya Airways (KQ) had plans to introduce direct flights to Beijing and Shanghai as it expanded its Asian operations.

The Kenyan national carrier also plans to start daily direct flights to Guangzhou – which had previously been three times a week.

In terms of traffic, Emirates is the leading carrier between Africa and the Far East, with a 22% market share (2013 statistics from ICF), followed by Ethiopian (17%) and Qatar (12%). Focusing on China, Ethiopian is the leading carrier with a 25% market share, followed by Emirates (19%) and Qatar (11%).

Gulf carriers, primarily Emirates and Qatar, have made aggressive inroads into Africa, increasing capacity by 65% and 100% respectively, from 2008 to 2013.

Emirates now offers non-stop or one-stop services to 23 cities on the continent, while Qatar flies to 17 cities.

Eastern promise



KQ is stepping up capacity to China with new aircraft deliveries.

Meanwhile, these carriers have also grown quickly into China, with Emirates and Qatar increasing seat capacity by 70% and 80% respectively over the same five-year period.

So, in the context of these growth figures, what are the challenges?

Carlos Ozores, principal at ICF International looked at the issues, starting with the competition

from major Gulf/Middle Eastern carriers, especially Emirates and Qatar, but also Etihad and – increasingly – Turkish.

“This affects all African carriers,” he said. “These Gulf and Middle East carriers have several things working in their favour; the geographic location of their hubs offer both traffic, revenue and cost advantages.

“On the traffic and revenue side, the location allows them to concentrate traffic from hundreds (if not thousands) of origin-destination markets, and maximise payload.”

On the cost side, Ozores noted that the GCC hubs are only about four to eight hours from most African cities, and about seven to eight hours from major Chinese cities. “This is an ideal range to optimise payloads [eg maximise cargo revenue], and offers operating cost efficiencies not found on ultra-long-haul flights, say of more than 12 hours.

“Ultra long-haul flights are very costly due to additional fuel and crew requirements, and are generally only viable when there is sufficient high yield traffic to justify the very high operating costs,” he explained.

In May last year SAA adjusted its Johannesburg – Beijing service, hoping it would improve the performance of this loss-making but highly strategic route. Since May, the three weekly

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flights depart Johannesburg at evening hours, instead of midnight. They arrived in Beijing during the late afternoon, which allowed additional flight connecting options in Beijing.

Ozores believes that SAA cannot strive to be a carrier that connects China and the Far East to the African continent due to its outlying geographic location. "It has to focus on its core markets – South Africa and neighbouring countries, complemented with feed to Brazil, another market with strong demand from China-Far East which has limited air service."

Ozores believes that until SAA has the right wide-body fleet, it cannot operate its ideal, right-sized long-haul network. "The A340 is clearly not the right aircraft for SAA's long-haul missions; they are very expensive."

He explained that aircraft like the upcoming Boeing 777-8X (or other new-generation wide-bodies) would enable SAA to profitably operate a balanced long-haul network that complemented its domestic and regional networks.

"The question is which aircraft type(s) is (are) right, and which China-Far East routes make the most sense for SAA in the long run?"

There have been questions raised as to whether a tie-up with a Gulf carrier, or forming an African mega-alliance, could improve SAAs underperforming Asian routes, but Ozores is not convinced that this would deliver benefits to SAA in terms of its ability to serve China and the Far East.



A340s are too expensive to operate Asian routes profitably for SAA.

"While it could potentially offer more China-Far East code-share destinations via a partner hub, this would ultimately hurt SAA's domestic, regional and Brazil routes, as it would severely cut connecting traffic.

"Without eastern long-haul routes, SAA would most likely need to downsize its Brazil and (to a lesser extent) regional networks," Ozores observed.

He gave an example of the Emirates-Qantas alliance, which he believes has thus far failed to deliver the promised revenue benefits, leading many in the industry to question the move.

Over in east Africa, the challenges specific to ET are that it has a small local market size. However, the Addis Ababa (ADD) location is excellent for east-west connections between China and Africa/Europe. "The airport is not as

efficiently run as, say, the Gulf hubs, which suppresses its ability to thrive as a connecting hub. However, thus far, the airline has managed quite well."

Ozores continued: "ET has a well-located hub, very competitive cost structure, and profitable subsidiaries, including the ground handling monopoly at ADD. Because of this, it is well positioned to serve the Africa-China and Far East market, without the need for partnerships with Gulf carriers, provided that it makes intelligent decisions about its route network and doesn't overextend itself."

KQ has a strong potential to participate in the China/Far East-Africa market. Like ET, its hub is geographically well located to connect east and west. Key to the carrier's long-term success is the expansion of Jomo Kenyatta International Airport (NBO). The brand new Terminal 1A, when fully operational, will have an added capacity to handle more than 2.5 million people, much to the relief of airlines and passengers after last August's inferno.



"From a network perspective KQ, like ET, should focus on core China and Far East routes that maximise connectivity to its domestic and regional networks, while also leveraging its KLM and SkyTeam partnerships," Ozores advised.

Interestingly, Cathay Pacific is the only Chinese carrier operating to Africa, linking its Hong Kong hub to Johannesburg. No carrier from the mainland has yet announced services to Africa.

Data provided by ICF showed that while demand from China to Africa is concentrated in very few cities (Beijing, Guangzhou, Hong Kong and Shanghai combined for more than 90%), it is spread across many African destinations (the top 20 cities account for 75% of demand from China).

Ozores explained that this meant that Chinese carriers would need a strong partner – and an efficient connecting hub – to leverage the potential of the China-Africa market, as their routes would depend to a large extent on connecting offline traffic. "This does not mean that Chinese carriers won't eventually enter the African market but they have thus far pursued long-haul opportunities in denser city pairs, notably North America and Europe," Ozores concluded.

SOMMAIRE

Les relations optimistes Afrique-Asie

L'Asie, et la Chine en particulier, se trouve au cœur du boom du commerce et de l'investissement Afrique-Asie. Keith Mwanalushi nous présente les opportunités et les défis engendrés par ces liens florissants pour les compagnies aériennes d'Afrique de l'Est et du Sud.

Le commerce entre l'Afrique et l'Asie ne cesse croître. La Chine est déjà le plus grand partenaire commercial de l'Afrique. De 2008 à 2013, la capacité en nombre en sièges a augmenté de plus de 40% entre l'Afrique et l'Extrême-Orient.

Celle-ci a plus que triplé entre l'Afrique et la Chine. Cette croissance n'affiche à ce jour pas de signes de ralentissement. La Chine représente désormais 60% de la capacité, contre seulement 23% en 2008.

Huit compagnies aériennes (dont Ethiopian Airlines et South African Airways) opèrent aujourd'hui des liaisons entre l'Afrique et la Chine. Au moment où African Aerospace allait sous presse, Kenya Airways prévoyait d'introduire des vols directs vers Pékin et Shanghai et Ethiopian Airlines vers Guangzhou.

Emirates est pourtant la compagnie qui transporte le plus de passagers entre l'Afrique et l'Extrême-Orient. Elle représente 22% des parts de marché, suivie d'Ethiopian (17%) et de Qatar (12%). Les opérateurs du Golfe ont donc réalisé une percée significative en Afrique.

Quels défis guettent les compagnies africaines dans ce contexte ?

Carlos Ozores, un responsable d'ICF International, souligne que « les transporteurs du Golfe et du Moyen-Orient se situent à environ quatre à huit heures de vol de la plupart des villes africaines et entre sept à huit heures des grandes villes chinoises. C'est donc une situation idéale pour optimiser les opérations et les coûts d'exploitation par rapport à des vols long-courriers ». Ceux-ci nécessitent plus de carburant, des équipages supplémentaires et ils ne sont généralement pas viables quand il n'y a pas assez de trafic.

La question des alliances entre les transporteurs du Golfe et les compagnies africaines est également primordiale.

Enfin, Cathay Pacific est la seule compagnie chinoise opérant en Afrique via son hub de Hong Kong vers Johannesburg. Les transporteurs chinois auraient besoin, selon Carlos Ozores, d'un partenaire solide et d'un hub de connexion efficace pour exploiter le potentiel du marché entre la Chine et l'Afrique.



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Three Mil Mi-17s were airfreighted to CAR from Sri Lanka using an Antonov An-124.

Drones are buzzing

The United Nations MONUSCO peacekeeping force in the Democratic Republic of the Congo (DRC), based at Goma Airport, recently celebrated its first year of operating unmanned aerial vehicles (UAVs) in the troubled state.

Alan Warnes explains their mission.

A civil war between the Lord's Resistance Army (LRA) and government forces has led to more than 300,000 people being displaced from their homes in the DRC.

With many now living as refugees across the DRC, the Central African Republic (CAR) and South Sudan, MONUSCO is assisting in the required humanitarian aid as well as trying to work with the DRC's armed forces to protect the population.

The first of six Italian-built unarmed Falco UAVs took to the air on December 3, 2013 after Selex ES was awarded a three-year contract to provide an aerial surveillance solution for UN operations in the eastern DRC.

This is the first time the UN has used UAVs and is being seen as a possible template for future operations in other countries where it has a presence, such as Mali.

The Falcos are working with the UN's newly created Force Intervention Brigade (FIB), specifically tasked to carry out targeted offensive

operations aimed at neutralising armed groups threatening state authority and civilian security.

The FIB can work with or without the support of the Forces Armées de la République Démocratique du Congo (DRC army) while trying to fulfil its objectives.

Thick forests, rugged terrain and the scarcity of roads on the DRC's eastern border with Rwanda and Uganda have complicated MONUSCO efforts to control the resource-rich area. The addition of UAVs means the UN can better monitor remote areas, focusing on the movements of armed groups to help protect the civilian population more efficiently.

The medium altitude long endurance (MALE) Falco operates with an 154lb (70kg) mission payload that includes a Selex Gabbiano radar and an electro-optical (EO)/infrared (IR) turret. It has a range of 155 miles (250km), although when working with relay stations, a much greater range can be achieved.

The high resolution Gabbiano synthetic

aperture radar (SAR) can work in 'spot' or 'strip' modes, while providing persistent surveillance, and with the ground moving target indicator (GMTI) mode can detect moving targets on the ground. The aerial picture can be downlinked to a remote video terminal, or directly to a ground control station. The UAV can provide intelligence from out-laying areas without endangering the lives of UN troops.

The Falco has also saved lives. On May 5, during a surveillance operation, one spotted people in danger after a boat capsized in Lake Kivu near Goma. This led to the intervention of UN peacekeepers and 14 people were subsequently rescued, although at least one died.



Since operations got under way in December 2013, there have been at least two accidents. The first one on January 15, 2014 saw a Falco running off the end of Goma Airport's runway. But, according to reports, it was not too seriously damaged.

However, the second accident on October 20, 2014 was more serious. According to MONUSCO, the Falco crashed shortly after taking off from Goma's airport. It came down in an uninhabited area two miles (3km) north of the city and, while it did not cause damage or injure anyone, the UAV was a write-off.

In a report earlier this year, analysing the

SOMMAIRE

Les drones toujours en action en RDC

La force de maintien de la paix de la Mission de l'Organisation des Nations Unies en République démocratique du Congo (MONUSCO), basée à l'aéroport de Goma, a récemment célébré la première année d'exploitation des drones (UAV) dans cet état en conflit. Alan Warnes explique leur mission.

La guerre civile opposant l'Armée de résistance du Seigneur (LRA) aux forces gouvernementales a contraint plus de 300 000 personnes à fuir leurs foyers. Nombreux d'entre eux sont réfugiés à travers la RDC, la République centrafricaine et le Soudan du Sud. La MONUSCO participe à l'aide humanitaire et travaille avec les forces armées de la RDC pour la protection de la population.

Les six premiers drones Falco de fabrication italienne, ont volé le 3 décembre 2013, après l'obtention par Selex ES d'un contrat de trois ans pour des services de surveillance aérienne lors des opérations de l'ONU dans l'est de la RDC. C'était la première utilisation des drones par l'ONU et pourrait servir lors des opérations où l'organisation est présente, comme au Mali.

Il soutiendrait la nouvelle brigade d'intervention (FIB) des Nations Unies chargée de mener des opérations offensives ciblées pour neutraliser les groupes armés menaçant l'autorité de l'Etat et la sécurité civile. Grâce aux drones, l'ONU peut mieux surveiller les zones reculées ou sans infrastructures routières surtout à la frontière avec le Rwanda et l'Ouganda.

□ □ □ □ □

Le Falco (MALE) comprend un radar Selex Gabbiano et une tourelle EO/IR. Le Ground Moving Target Indicator (GMTI) peut détecter des cibles mobiles sur le terrain. La photo aérienne peut être en liaison avec un terminal vidéo à distance ou directe avec une station de contrôle au sol. Le drone peut fournir des renseignements sur des zones de pose sans mettre en danger la vie des troupes de l'ONU.

Dans un rapport publié en début d'année sur l'analyse des performances du Falco, le Secrétaire général de l'ONU Ban Ki-Moon, a déclaré que les drones se sont révélés utiles en fournissant des informations à la MONUSCO de manière réactive et efficace notamment sur les activités illégales des groupes armés.

Par ailleurs, le Sri Lanka a participé pour la première fois à une mission de l'ONU. Trois appareils Mi-17 de force armée du pays, la SLAF, ont en effet été transportés à bord d'un Antonov Airlines An-124, le 8 septembre dernier, en direction de la République centrafricaine.



Flight from Pisa: the first Falcos were transported inside custom-made air vehicle containers on board an Italian Air Force C130J operated by the Pisa-based 46th Aerobrigade. The flight took off from Pisa on November 13, 2013 routing via Luxor, Egypt and Nairobi, Kenya before arriving at Goma Airport, DCR on November 15.

in the DRC

performance of the Falco, UN secretary general Ban Ki Moon said the drones had proved useful: "Since their operationalisation, the unmanned aerial systems have provided MONUSCO with a responsive, controlled and timely source of information, particularly in terms of supplementing the force's intelligence, surveillance, and reconnaissance efforts against the illegal activities of armed groups," he said.

■ For the first time in the history of Sri Lanka and the Sri Lankan Air Force (SLAF), helicopters are being deployed on a United Nations mission.

Firstly, three SLAF Mi-17s, painted in white UN colours, were airfreighted out of Sri Lanka on September 8 on board an Antonov Airlines An-124, headed for the Central African Republic. The aviation unit, designated No 62 Helicopter Flight, an extension of the SLAF's No 6 Helicopter Squadron at Anuradhapura, will support the UN multidimensional integrated stabilisation mission for the CAR (MINUSCA).

Along with the three helicopters, 122 personnel are being deployed, consisting of pilots, engineers and other supporting staff.

In addition to the main contingent, two officers have been selected as staff officers, who will be based at the MINUSCA headquarters to assist and coordinate the aviation unit during the deployment, which took effect from September 15, 2014.

The SLAF was selected for the mission through a competitive evaluation process by the UN. During a recent press conference, the SLAF said that the professionalism of its pilots, the technical expertise and know-how of its engineering elements, along with the discipline of its entire force, was considered during this evaluation process.

This helicopter deployment will be tasked to carry out VIP transportation, transportation of food and equipment, domestic flying, para dropping and medical evacuation in the Central African Republic, in support of the overall UN mandate for that nation.

Another SLAF aviation unit is presently undergoing final preparations to be deployed in South Sudan under the United Nations mission in the Republic of South Sudan (UNMISS). This second deployment will also comprise three Mi-17s and a similar number of personnel. Both of the SLAF's UN operations will be undertaken for an initial period of one year, but may be extended.

The SLAF has a fleet of 21 Mi-17s and, at the press conference, it was stated that the deployment of six of them should not have an impact on domestic operations.

The press conference comment on the number currently in service confirms that the SLAF has taken delivery of most, if not all, of the 14 additional Ulan Ude-built Mi-171 variants that Rosoboronexport received an order for in July 2012. Prior to this, only around nine Mi-17s were thought to remain in SLAF service.



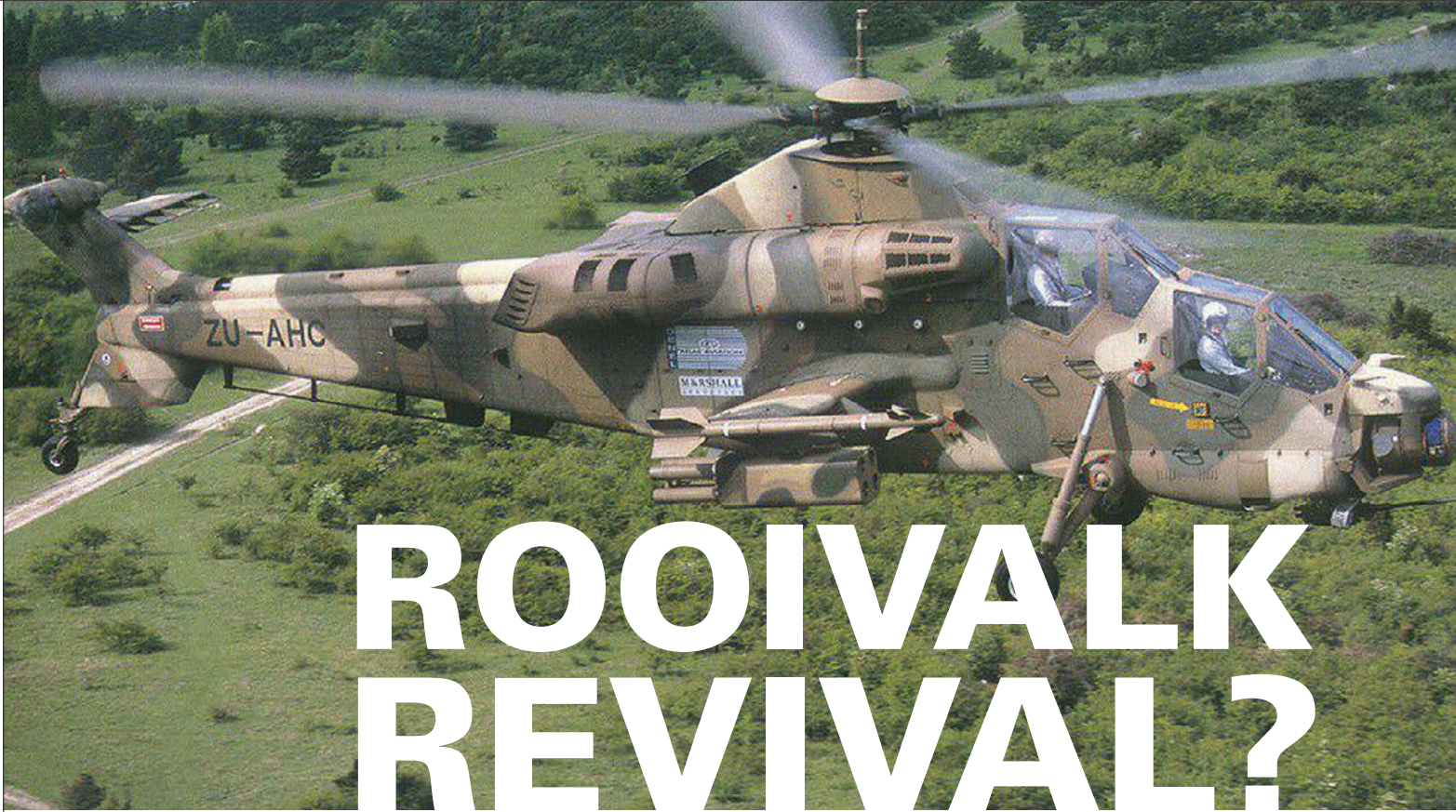
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ROOIVALK REVIVAL?

«La renaissance du Rooivalk AH-2 ?» – Page 40

Production of Denel's Rooivalk AH-2 attack helicopter ended in 1998 after just 12 aircraft, plus the prototype, had been built. Now, as Jon Lake discovers, impressive performance has led to calls for more.

The early history of the Rooivalk programme was plagued with technical difficulties and long delays. But, since the aircraft gained its full military type certificate in April 2011, the helicopter has proved impressive and highly effective, attracting the attention of potential export customers and leading to a clamour among South African politicians and airmen to re-open the production line.

However, reaching this point has been an extremely rocky road.

The Rooivalk programme began in 1984, when Denel's predecessor, the Atlas Aircraft Corporation, began development of an indigenous South African attack helicopter.

South Africa was still in the apartheid era when sanctions severely limited the country's access to weapons systems.



Atlas began working on a proof-of-concept aircraft, the Atlas XH-1 Alpha, based on the engine and dynamics system of the Aerospatiale Alouette III, but with a new tail-dragger airframe with stepped tandem cockpits.

The XH-1 first flew on February 3, 1985 and two SA330J Puma helicopters (177 and 189) were converted to serve as systems test-beds with stub wings for weapons, a 20mm cannon and a nose-mounted sensor turret.

Though successful, both the Alpha and the Beta

models demonstrated that more power would be required by the eventual production attack helicopter design, and the decision was taken to base the new XH-2 aircraft on the dynamics and rotor system of the Atlas Oryx – South Africa's indigenous upgrade of the Puma – to something broadly equivalent to the Super Puma.

The XH-2 Rooivalk prototype (wearing the South African civil registration ZU-AHC) made its maiden flight on January 15, 1990, subsequently serving as the experimental development model (XDM) and then as the engineering development model (EDM) for production evaluation.

During this period, the Atlas Aircraft Corporation was quietly absorbed, the new Denel company being established as a state-owned industrial company under the Ministry of Public Enterprises in April 1992.

With the end of apartheid in 1994, defence spending was reduced significantly and the original South African Air Force (SAAF) requirement for 36 production combat support helicopters (CSH-2) was reduced to only 12 aircraft. For a while it seemed likely that export orders might make up the shortfall, with Britain's Army Air Corps evaluating the type, though the inability of the SAAF to actually get its own CSH-2s (redesignated as AH-2s from 1998) into full frontline service counted heavily against the aircraft.

Interestingly, Turkey later actually shortlisted the Rooivalk before the \$2 billion order was thwarted by "a foreign

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supplier who refused to supply a critical component”, according to programme insiders.

These efforts to export the type resulted in some changes to the Rooivalk. One of the most significant was changing the primary armament from the Denel Ingwe laser-guided medium-range multi-role anti-tank guided missile to the Denel Mokopa, a more modern weapon utilising semi-active laser (SAL) guidance, but with optional millimetre-wave radar (MMW) and two-colour imaging infrared (IIR) seekers.

Full-scale development of the Mokopa system began in November 1996 and a Rooivalk made the first air-launched firings during 1999, followed by the first guided tests in November 2000.

At home, series production of the 12 Rooivalks for the SAAF concluded in 1998, some 14 years after programme launch and eight years after the first flight.

The production AH-2 Rooivalk entered service with No16 Squadron at AFB Bloemfontein in Bloemfontein on October 28 1999, though it was not expected that full operational capability would be achieved before June 2007.

By the time this milestone was reached, the fleet had been reduced to 11 aircraft, following the loss of one on August 3 2005 during trials of a new auto-hover system.

The year 2007 was a bleak one for the programme. On May 17, Denel Group CEO Shaun Liebenberg announced that the company had decided to cease further development and funding for the Rooivalk as an export product following its failure to win the Turkish attack helicopter tender, and said that Denel would not be able to afford to look after the air force’s Rooivalk aircraft in the future.

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Public Enterprises Minister Alec Erwin said afterwards that the departments of defence and public enterprises would have to decide later in the year what to do about the Rooivalk, and whether to subsidise the maintenance of Denel’s Rooivalk capability so that the company could continue servicing and supporting the helicopters over their 25-year lifespan – or whether the air force would have to mothball the helicopters and write off the costs entirely.

In the event, the government decided to throw the Rooivalk programme a lifeline, investing R962 million (then about \$137 million) for support until 2011, and to bring the aircraft up to full operational status. Defence minister Mosiuoa Lekota announced the decision to Parliament during November 2007.

The original June 2007 operational date was missed and it was not until November 2008 that the first four helicopters had been upgraded to an interim operational configuration (though integration of the Mokopa missile had been suspended as a cost-saving measure). The remaining seven Rooivalks were brought to the same standard by September 2009.

SOMMAIRE

La renaissance du Rooivalk AH-2 ?

La compagnie Denel ne produit plus l'hélicoptère Rooivalk AH-2 depuis 1998, après la construction de seulement 12 hélicoptères, en sus du prototype

Jon Lake indique comment l'impressionnante performance de cet appareil pourrait déboucher sur une reprise de la production.

Le programme Rooivalk AH-2 a été affecté par des difficultés techniques et des retards dès son lancement en 2004. L'hélicoptère a reçu sa certification militaire en avril 2011. Ses belles performances ont tellement conquis des clients potentiels qu'une relance de la ligne de production est probable. Mais avant d'en arriver là, la route fut périlleuse.

L'Afrique du Sud était encore à l'époque de l'apartheid et le pays avait un accès limité aux systèmes d'armement en raison des sanctions internationales. Le prototype du Rooivalk avait effectué son vol inaugural le 15 janvier 1990. Avec la fin de l'apartheid en 1994, le budget de la défense a été réduit de manière significative. Par conséquent, la production de 36 hélicoptères a été ramenée à 12 appareils. La production en série des 12 Rooivalks a été conclue en 1998, soit 14 ans après le lancement du programme et huit ans après le premier vol. Il semblait également peu probable que les commandes à l'exportation puissent combler le déficit. Des efforts avaient pourtant été réalisés pour exporter le Rooivalk. 2007 a aussi été une année sombre pour le programme, le PDG de Denel ayant annoncé l'arrêt du développement et du financement du Rooivalk comme un hélicoptère d'exportation après son échec de décrocher un contrat avec la Turquie.

Depuis la certification militaire du Rooivalk en avril 2011, trois hélicoptères ont pourtant été déployés avec succès en République démocratique du Congo (RDC) au début de novembre 2013. En mars 2014, Nosiviwe Mapisa-Nqakula, la ministre de la défense sud-africaine, a défendu publiquement le redémarrage d'une ligne de production du Rooivalk. Même son de cloche du côté du Lieutenant général Masondo Vusi qui souhaite également une reprise de la production.

Riaz Saloojee, PDG de Denel, a toutefois tempéré sur l'avenir du Rooivalk en soulignant quelques difficultés potentielles.

With funding for the Rooivalk in place, the decision was taken to bring the 11 surviving aircraft to a new Block 1F standard to improve the safety, reliability and accuracy of the helicopter’s weapons systems, and to complete all outstanding certification flight testing.

The Block 1F upgrade included modernising the weapon system (including integrating the still unfunded Denel Dynamics Mokopa air-to-surface missile), as well as a major gearbox upgrade,

which involved significant remanufacturing of certain gearbox mounting components. The upgrade also included making provision for new external fuel tanks that would allow a 50% increase in the Rooivalk’s self-deployment range.

The Block 1F upgrade underwent a rigorous testing and evaluation programme at the air force’s Test Flight and Development Centre at Bredasdorp from November 2010. This included day and night flying, target identification and tracking, cannon firing and evaluation of the secure communications and self-protection systems.

With this successfully concluded, the Rooivalk was awarded its full military type certificate in April 2011, and the first five aircraft upgraded to Block 1F standards were ceremonially handed over to air force chief of staff, lieutenant general Carlo Gagliano at Denel’s Kempton Park site adjoining Johannesburg Airport. The remaining six aircraft were delivered by September 2011.

Three white-painted Rooivalks were deployed to the Democratic Republic of Congo (DRC) at the beginning of November 2013 in support of the United Nations Force Intervention Brigade (FIB), which consisted of South African, Tanzanian and Malawian force elements. The Rooivalks flew a number of highly successful missions during the deployment, attracting praise from senior officers and politicians.

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In March 2014, South African Defence minister Nosiviwe Mapisa-Nqakula publicly advocated restarting a Rooivalk production line, revealing that other countries had made enquiries about the aircraft following its DRC deployment.

In August 2014, South African Army Chief lieutenant general Vusi Masondo said he would also like to see the aircraft back in production, pointing out that export contracts would minimise costs due to the potential economies of scale.

Denel Group CEO, Riaz Saloojee, has said that the company sees a future for the Rooivalk, but has cautioned against expectations of a return to production, pointing out a number of potential difficulties.

The next step for the Rooivalk seems likely to be acquisition of the Mokopa missile by the SAAF. The weapon has already been acquired for and tested by the Algerian Navy’s new AgustaWestland Super Lynx 300 helicopters. This would give the Rooivalk a useful stand-off capability, and could finally open the door to export orders.

Former Denel Aviation CEO, Mike Kgobe, said that the production line could be re-opened, giving a figure of between 75 and 100 aircraft to make it economically viable. One large order could be enough to provide this, and globally there are a number of attack helicopter requirements that could potentially result in orders of this size and scale.

The Ahrlac has a high-wing, twin-boom configuration, with a pusher propeller.



The Ahrlac was developed in Africa for Africa (and beyond), primarily as a low-cost platform for homeland security roles.

Jon Lake takes a closer look.

Light and fantastic

«Léger et fantastique» – Page 42

AHRLAC Holdings' advanced high-performance reconnaissance light aircraft – Ahrlac – which made its first public flight on August 13, 2014, is certainly the first turboprop-powered, civil-certified aircraft to be developed in Africa.

It may possibly also be the first fully indigenous military aircraft developed on the continent.

AHRLAC Holdings, a joint venture between the Paramount Group and Aerosud, two South African aerospace companies with impressive track records, developed the aircraft in South Africa.

The Paramount Group was founded in 1994 and is today the largest privately-owned defence and aerospace business in Africa, working in land systems, aerospace, naval systems, advanced technologies and electronic systems.

Though arguably best known for a family of advanced armoured combat vehicles, the

Paramount Group has a strong presence in aerospace, offering avionics and mission systems integration for fixed-wing aircraft, helicopters and unmanned airborne vehicles (UAVs).

Aerosud was formed in 1990 by senior personnel from the Denel Rooivalk attack helicopter and Atlas Cheetah fighter programmes.

The company was initially involved in the proposed re-engining of the Dassault Mirage F1AZ with the SMR95 turbojet, a version of the Klimov RD-33 engine used in the MiG-29. Aerosud then diversified into the commercial aerospace sector, initially designing galleys and other interior items for commercial airliners. Today the company manufactures parts and sub-assemblies for Airbus, Boeing, BAE Systems, and AgustaWestland, and is a risk-sharing partner in the Airbus A400M programme.

Paramount's intention is to build African capabilities to solve African challenges. But the

Ahrlac has also been designed with the needs of 'first world' customers in mind.

The aircraft has been developed to meet a range of homeland security requirements, including border security and surveillance, coastal and maritime/exclusive economic zone (EEZ) patrol, combating piracy, and drug trafficking.

At the upper end of the 'role spectrum', the aircraft was intended to be capable of flying intelligence, surveillance and reconnaissance (ISR) and counter-insurgency missions.

This mission set would have historically required more costly manned aircraft or complex unmanned aerial surveillance systems. High-end manned solutions were considered to be too costly for the intended customers, while UAVs are constrained by high acquisition cost, limited payload capacity and difficulties associated with operation in non-segregated

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airspace, as well as control complexity and control link security.

UAVs also require a significant 'logistics footprint' for deployment. Aerosud therefore, launched a study into the viability of developing a low-cost yet high-performance manned alternative to UAVs, and this eventually led to the launch of the Ahrlac programme.

The Ahrlac project was initially intended to produce a new aircraft optimised as a more versatile substitute for UAVs for both civilian and military tasking, but soon developed into an initiative to produce an affordable ISR light-strike platform intended both for developing nations and for countries with sophisticated defence capabilities.

The aircraft integrates design features from attack helicopters, surveillance and reconnaissance aircraft and is optimised for multiple missions – not by providing simultaneous multi-role capability, but instead by using modular mission packages. These are integrated with an advanced avionics suite 'backbone' that allows on-board display and exploitation, but can also provide data relay to suitably equipped ground stations.

Claimed by its designers to be the first fully indigenous military aircraft developed in Africa, the Ahrlac is the first South African-designed military aircraft since the Denel Rooivalk attack helicopter, which was based on the dynamics system of the existing Atlas Oryx, itself a derivative of the Aerospatiale Super Puma.



By contrast, 98% of the new aircraft's 6,000 parts have been designed and produced locally by the Paramount/Aerosud engineering team. ☒

The resulting Ahrlac has a high-wing, twin-boom configuration, with a pusher propeller. Unlike most of its rivals, this is not an existing commercial light aircraft, crop-duster or basic military trainer design that has been modified for the ISR and light attack roles 'after the event', but a purpose-designed and dedicated light reconnaissance and counter-insurgency aircraft that has been built from the ground up to meet these requirements.

Two crew sit in tandem in the stepped cockpits under a single canopy. Martin-Baker Mk16 ejection seats are fitted in the prototype.

The Ahrlac's high wing and pusher propeller provide very good visibility for the crew and unobstructed sensor and weapons placement, while the high wing is also well suited for rough field and bush operations.

Operation from semi-prepared landing strips is also facilitated by the high floatation, heavy-duty retractable undercarriage. The Ahrlac requires minimal ground support and has a low logistics footprint that further enhances its suitability for deployed operations in remote areas.

The aircraft is powered by a Pratt & Whitney Canada PT6A-66 turboprop engine, flat-rated at

SOMMAIRE

Léger et fantastique

L'avion Ahrlac a été développé en Afrique pour l'Afrique et ailleurs, principalement comme une plate-forme low-cost en matière de sécurité intérieure. Le point avec Jon Lake.

L'appareil Ahrlac (Advanced High Performance Reconnaissance Light Aircraft) a effectué son premier vol le 13 août dernier. C'est le premier avion équipé de turbopropulseurs avec une certification civile conçu et assemblé en Afrique par AHRILAC Holdings (un partenariat entre Paramount Group et Aerosud). Il pourrait éventuellement être le premier avion militaire de ce type sur tout le continent.

Fondé en 1994, le Groupe Paramount est aujourd'hui la plus puissante compagnie privée dans le domaine de la défense, de l'aéronautique et du spatial en Afrique.



La compagnie Aerosud a quant à elle été formée en 1990 par des cadres supérieurs des programmes d'avions de combat Atlas Cheetah et de l'hélicoptère de combat Denel Rooivalk. Aujourd'hui, l'entreprise fabrique des pièces et des modules pour Airbus, Boeing, BAE Systems, et Agusta Westland. Elle participe aussi au programme A400M d'Airbus.

L'avion Ahrlac n'est pas uniquement destiné au marché africain mais peut répondre aux besoins des pays développés ayant également des capacités de défense sophistiquées. Il a été conçu pour la sécurité et la surveillance des frontières, les patrouilles côtières et maritimes ainsi que la lutte contre la piraterie et le trafic de drogue.

Le programme devrait donner une forte impulsion à l'industrie aérospatiale en Afrique avec la création de nouveaux emplois et de nouvelles compétences. Des activités de fabrication seront menées dans d'autres régions du monde, notamment en Asie.

950shp (and with potential growth to 1,600shp), which confers a relatively high cruise speed (270knots) and also gives useful range and loiter performance.

The aircraft is highly agile, allowing it to fly evasive and attack manoeuvres, and making it well suited to the advanced training mission.

Its airframe uses a mixture of metal and composite construction, with a composite nose cone, wing tips and engine covers, but with most of the airframe made from conventional alloy.

The aircraft is designed for use with an internal 20mm cannon, with four or six under-wing hardpoints for carrying a variety of weapons. The lower fuselage consists of a variety of interchangeable 'clip-on/clip-off' conformal modular units fitted with a variety of sensor systems, including infrared and optical cameras, synthetic aperture radar, electronic intelligence gathering and electronic warfare

equipment. The modular design gives maximum basic airframe commonality while ensuring a rapid role-change capability.

A full-scale mock-up was built in 2011, together with a fully instrumented flying quarter-scale radio-controlled model, which made some 80 flights. The first full-scale prototype that followed was built using design-for-manufacture technology. This allowed for jigless construction, which increased accuracy, reduced the need for hand skills and took less time to build.

The first flight was originally planned for 2012 but timescales slipped and it was not until 2014 that the prototype was moved from the Aerosud facilities at Waterkloof, where it was assembled and designed, to Wonderboom Airport on the northern side of Pretoria.

Towed along roads behind a Land Rover, with its wings attached, the aircraft had to be turned sideways to negotiate a toll gate, and the narrow streets around the destination airport proved challenging!

Preparations for the Ahrlac flight-test programme started during May 2014. The ground-test phase was completed during early July and the prototype (registered ZU-XDM and painted in a modern 'digital camouflage' scheme) made its first flight at Wonderboom Airport in the hands of test pilot Johannes 'Blokkies' Joubert on July 26 2014. A first public flight display followed on August 13 2014.



The first prototype, known as the experimental demonstrator (XDM), was expected to fly between 100 and 200 hours over the next six months to evaluate the aircraft's handling characteristics over the full flight envelope and to validate the design.

The XDM is fitted with comprehensive flight-test equipment, including temperature and strain gauges and accelerometers. A mobile flight-testing vehicle will be stationed wherever testing is conducted and a Pilatus PC-12 will act as a 'chase plane' on every test flight.

A second prototype, known as the advanced demonstrator (ADM) is already under construction and is expected to join the flight-test programme early in 2015. The ADM will be used to test mission and weapons systems.

Manufacture is expected to take place in and around the Centurion Aerospace Village (CAV), the highly successful industry-cluster initiative that continues to grow next to the Waterkloof Air Force Base, and which already includes the Aerosud development complex.

The programme is expected to provide a significant boost to the African aerospace industry, creating new jobs and new skills with Paramount, Aerosud and local sub-contractors. But while production facilities will be established in South Africa, the team expects to create manufacturing activities in other regions of the world, including Asia.



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MINE CRAFT

A corporate flight department is essential for Anglo American and, although it is facing up to the future with a smaller fleet, the company is determined there will be no diminution in standards, as Alan Dron reports.

Time is money. Anglo American Aviation Services (AAAS) aims to save as much of the former commodity as possible.

As the 'internal airline' of Anglo American, one of the world's largest mining companies, it operates both a series of daily hops to get personnel to and from remote mines in South Africa, and executive flights across the southern half of the continent.

The regular trips to airstrips serving mines makes AAAS one of the earliest proponents of what are today referred to as fly in, fly out (FIFO) operations.

Travelling by road from Johannesburg, where AAAS bases itself at OR Tambo International Airport, to mines such as Sishen or Kolomela in the Northern Cape, would take up to eight hours. The flight takes around an hour, increasing efficiency and saving a considerable amount of valuable staff time. It is also considerably less nerve-racking than surface transport: "Road conditions in South Africa are far from safe," commented chief pilot Sonny Janeke.

AAAS currently operates a Dornier 328-200JET (32 seats), two Beech 1900Ds (18 seats) and a Cessna Citation Excel (eight seats).

A Basler-conversion DC-3 turboprop is also operated around the world on AAAS' air operator's certificate (AOC) by another Anglo American company, Spectrem Air, for aerial survey work. The aircraft is readily distinguishable by its electromagnetic nose and tail booms and wingtip pods.

Maximising the productivity of company personnel is the name of the game and the



Chief pilot Sonny Janeke gets around 10 applications a week from people hoping to join the Anglo American Aviation Services team.

Dornier does two return trips daily to Sishen, while one of the 1900Ds operates the same frequency to Kolomela five days a week.

The duties of the second of the Beechcraft turboprops include flying three days a week to another mine in Venetia, Northern Limpopo.

The Citation Excel, meanwhile, is used to transport executives and materials around South Africa, Botswana and other destinations in southern Africa. "It's a nice, comfortable, eight-seater," said Janeke. "It has a 1500-1800nm range, so we can make Luanda from

here and, at a push, Nairobi in three to three-and-a-half hours."

The 328JET will typically fly 80-100 hours per month; the busier 1900 will also clock up 100 hours, the other, 50. The Citation Excel typically logs 20-30 hours.

The team at AAAS is still adjusting to the sale of its flagship, a Gulfstream G550. Ever since the purchase of a Grumman Gulfstream I in the 1960s, products of the Savannah-based manufacturer have been the flagship of the AAAS fleet.

However, after the parent Anglo American company made a 2012 pre-tax loss of \$239 million – its first for 13 years – economies had to be made. Top management decided the \$50 million G550 should be one of them.

"We were very, very sad to lose the G550. We'd had it for less than a year and we thought it was doing a fantastic job because of its range and speed," said Janeke. Its capabilities also stretched to being able to get into an airstrip close to one of Anglo American's mines some 12,500 feet above sea level in Chile.

"We understand that, with the financial situation, the CEO had to take a decision [to sell the aircraft], but we were very saddened."

For years, the Gulfstream's predecessors had flown Anglo American CEOs around the globe – again with the aim of maximising their productivity. With operations in Africa, South America and Australia, the Gulfstreams' trademark long range was very welcome, and useful.

Typically the CEO, or other senior executive, would come on board

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The first aircraft to join Africa's first corporate flight department was a de Havilland Dragon Rapide, similar to this.

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after a day of meetings or mine visits, eat, work, go to bed and the crew would position the aircraft overnight so the CEO was on the spot for their next appointment the following morning.

The fleet shrank further in 2013 when the Oppenheimer family, who have long been shareholders in Anglo American and placed several of their family aircraft with AAAS, opened their own FBO, Fireblade Aviation, and transferred them there.

Africa can be a daunting region and AAAS builds in several layers of safety to its operations. No rough field operations are undertaken and a close watch is kept on the geopolitical situation in nations to which it is likely to operate.



“We have a group of people who advise us on places that are particularly unsuitable or that have security issues,” said aviation services manager Duncan McCallum. “If we’re due to go to an area we’ve not been to before, we do a risk assessment. Generally, we don’t go to places if we don’t have people on the ground there; we’re very conservative. We won’t do a charter into the middle of nowhere.”

Most airfields in Africa “are OK these days”, he added, with the commonest problems being a lack of navigational aids or performance issues in areas where the temperature rises to 35C or above and which can be several thousand feet above sea level.

Violent thunderstorms can also be a problem in southern Africa during summer.

In 78 years of operation, the organisation has had just one fatal accident. In 1974, a Beechcraft Baron, flown by a single freelance pilot, crashed on take-off from a South African mining airstrip,

Leading the world since 1936

Anglo American got off the ground with what it called its ‘air section’ in 1936. It was the first company flight department in Africa – possibly the world – and developed an early reputation for innovation.

It was first equipped with a de Havilland Dragon Rapide biplane, one of the UK’s most successful inter-war airliners. At Anglo American’s 1937 annual meeting, chairman Sir Ernest Oppenheimer explained to shareholders that the company had bought it “for the use of its officials in visiting the properties in which it is interested and we have found this to be of very great value in reducing the time taken in travelling”.

Post-1945, the Rapide was replaced by two further de Havilland types, an eight-seater Dove and its four-engined, 14-seat passenger development, the Heron. In 1960 the ‘air section’ acquired Africa’s first turboprop corporate aircraft – a US-built Gulfstream I – and until 2012 it had always used Gulfstream products as the flagship of the company’s fleet.



One of AAAS’ most unusual missions came following the 2010 eruption of the Icelandic volcano Eyjafjallajökull. An event at the other end of the world might seem unlikely to impinge on South Africa. However, a group of senior company personnel was trapped in the country when the volcanic ash cloud closed Europe’s airspace for days. AAAS was able to fly two planeloads of executives as far as Toulouse, southwest France, from where they were able to get trains back to the UK.

The ‘air section’, which was renamed Anglo American Aviation Services in recent years, has always made safety its absolute priority. Measures included an early insistence that its aircraft should always be flown and serviced by Anglo American personnel. For added reassurance, all its aircraft over the past 78 years have been twin-engined and, since 1974, have operated under a two-pilot regime.

killing all six on board. From that date, AAAS has only used its own pilots on its flights.

AAAS is audited not only by the South African regulator, but also by those of Botswana and Namibia. A second Citation Excel, owned by another part of the Anglo American empire, operates out of Namibia and AAAS handles its maintenance, as well as occasionally looking after a Botswana-based Beech 1900D.

The company has just fewer than 50 personnel and low staff turnover has become a hallmark of the operation, said McCallum. “We have very high standards and it’s a nice place to work.” This is borne out by the fact that Janeke gets around 10 CVs a week from people wanting a job there.



AAAS has an aviation safety role beyond its own operations. It runs the rule over any operator that an Anglo American staff member plans to use.

“We have a global safety manager responsible for auditing every single aircraft for our people anywhere in the world,” explained Janeke. “If anyone wants to use an aircraft they have to come through us. We check that any aircraft we charter is safe.”

Additionally, AAAS is audited to the basic aviation risk standard (BARS), which lays down safe operating criteria for aircraft working in the resources sector globally. Its standards are such that it has a BARS gold rating, which means it requires to be audited only every two years, an achievement of which the organisation is proud. Most major companies in the sector are members and have access to each other’s audits. “So we don’t have to send somebody to Patagonia to check out an airline,” explained McCallum.

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*The Ebola outbreak is centred on west Africa but the impact is much wider. As **Dave Calderwood** explains, many countries are simply refusing to accept flights, even where the virus is not involved.*

MEDEVAC FEELS THE PAIN

«Medevac subit le stress» –
Page 50

The impact of the Ebola outbreak in west Africa is being felt all over the continent – even in Nairobi, Kenya almost 3,500 miles away. Medevac operations across Africa are being compromised despite the disease being confined to the west.

Sean Culligan, chief operations officer of African Medical and Research Foundation (AMREF) Flying Doctors, based in Nairobi, explained: “A large part of the world gets Africa confused as a country rather than a continent four-and-a-half times the size of America. So, to an extent, Nigeria and Nairobi becomes the same place.

“We have had people say, ‘we don’t want to come to Nairobi because you’ve got Ebola’. That’s a superficial level of how it affects us.

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“One of the problems we’ve had is that there’s an enormous number of people who live and work in the Ebola area who suffer from illnesses or accidents entirely unrelated to the virus. You’ve got countries within Africa who will not allow people from an Ebola-affected region to be taken anywhere else. A case in point would be South Africa, which has said nobody who is not a South African citizen will be moved from the Ebola contagious countries.

“It took a while for Kenya to react in a similar way and for a long time we had Kenya Airways continuing to run, but eventually the social pressures became such that flights from those regions were stopped.

“Hundreds of our clients’ insurance companies throughout



the world want to know what our response is because, north of Johannesburg, we are the only internationally accredited air ambulance on the continent. As such, we are the ‘go-to’ company people seek for advice. ‘Can you go to Lagos? Can you go to Accra? Can you go wherever?’

“If it is a non-Ebola related illness in an Ebola country, it’s not just depending on ‘Can we go and pick them up?’ It’s where are we going to take them and who’s going to accept them? Also, how can we guarantee what their movements have been for the last two to three weeks [The period of incubation for the Ebola virus]?”

It’s undoubtedly a difficult time for all involved in medicine work in Africa, but the AMREF Flying Doctors continue to operate across a huge expanse of the continent.

“We do about 1,000 evacuations and fly about a million miles a year,”



Sean Culligan: “We are the ‘go-to’ company people seek for advice.”

said Culligan. “We have one evacuation on at the moment which is a pick-up from the Democratic Republic of the Congo (DRC) to take to the Lebanon. We have another request to take someone from Nairobi to Perth in Western Australia, a flight to Zanzibar, a flight to Tanzania and a flight into one of the safari areas of Kenya.”

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This wide spread of trips is possible because of the flying doctor fleet – based on Australia’s similar service – that AMREF has available. It works with Phoenix Aviation of Wilson Airport, Nairobi to keep a total of 17 aircraft on call.

The fleet includes Cessna Caravans to fly into the bush and pick-up an ill or injured person from a dirt strip, Beechcraft King Airs for medium-distance, and Cessna Citation jets for longer

Flying doctors know the risks

Flying doctors is a wholly-owned subsidiary of the African Medical and Research Foundation (AMREF). It was set up in 1957 by three doctors to serve east Africa, though its reach now goes all over the continent.

As well as the flying doctors service, AMREF also pursues an outreach programme to improve healthcare across the board.

In 2013, AMREF launched its 'maisha' [it means 'life' in Swahili] insurance plan, which provides guaranteed medical care, including an air ambulance if needed, to companies and individuals in the region. Profits go to AMREF's outreach and charity evacuation flights.

Medevac operators may be asked to travel almost anywhere in the world by travel insurance companies with injured, ill or stranded clients. So, keeping up with the security and health situation at out-of-the-way locations is paramount.

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UK operator AirMed recently announced a link-up with MedAire, a global supplier of aviation risk management services.

"We have in place a full safety management system and we've always done risk assessments of where we're going. That could be from the standard airfield brief and its surroundings to a full security assessment," said Jane Topliss, head of business development at Oxford-based AirMed. "However, we found that we were going to so many different sources of information to do a comprehensive

transfers. Wing-to-wing transfers between a bush plane and a jet can take place at international airports.

It might be a surprise to learn that patients are suffering from much the same issues as elsewhere in the world.

"If you think about it, not too many people get gored by wild animals or chopped up by inter-tribal battles," said Culligan. "About 45% of our evacuations are related to road traffic accidents. The driving standards and the road conditions all contribute to an enormous number of accidents. "People still get sick when they're

risk assessment that we figured there had to be a better way. We'd heard a lot of good things about MedAire. They're part of International SOS, who we know well and provide services to. MedAire does an extremely good job of providing a comprehensive report on countries and specific regions within countries, including individual airfields, covering the security and health assessments.

□□□□□

"Libya is a good example. Until recently we were able to operate relatively easily into the country but, unfortunately, this has changed and we are now unable to fly there for security reasons and airport closures. However, this could all change again in the coming weeks and we need the correct information to be able to make the judgment call.

"If you go to the UK Foreign Office website, many countries look like a red zone, a no-go area, but that's not actually a true reflection of the type of travelling or work we do. We're not going backpacking around the country.

"For us, it's to the airport, then we need to know if it's safe to leave the confines of the airport. So, can we land? Can our teams travel safely – we have a duty of care for them – to the hospital to collect the patient and then travel back? Or, is that a high-risk part of the journey, in which case we need to arrange for the patient to be brought to the airport? MedAire provides us with a one-stop-shop for all that very up-to-date information."

abroad; they still have heart attacks, or fall over and break things. They sometimes get malaria if they've been here for longer. We don't just deal with tourists. There's a large expat population and a large local population that all use our services.

"By local, just think of the east Africa region – someone in Rwanda, someone in Burundi, someone in Djibouti or Ethiopia will probably go for us to move them back to Nairobi, the nearest centre of medical excellence, or back to their home country."

Continued
on Page 50



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CONTINUED FROM PAGE 49

The challenges of operating as an air carrier in Africa apply even more so for an air ambulance, where speed of response and quality of patient care are vital.

Culligan explained: "Distances are vast; that's the first thing. Medical facilities are few and far between and not necessarily up to the standard people will expect.

"We have political and economic strife throughout the land. Our borders are Somalia and South Sudan, with all the inherent problems. We operate in a lot of areas where we have to be very careful with security. We have to know what's happening on the ground at that particular location.

"Some countries are less sympathetic to medical evacuations than others. There are those who will give us blanket clearance to come in and rescue people and there are others that will make us jump through hoops because they are concerned about strange aircraft coming in to their country.

"When you have to spend, as we do for some countries, 6-12 hours negotiating a landing clearance, it makes it enormously difficult. There's always the problem of 'we may lose this patient if we don't go now'. If the various civil aviation authorities, in line with the security authorities, could be made to understand that we are there for humanitarian purposes, we're trying to save lives, and the quicker we can get there, essentially bringing a hospital to the patient, then the better it would be for everyone."

■ International SOS is the world's leading medical and security travel services company, with clients in more than 70 countries. It is taking



What's in an air ambulance?

Air Rescue Africa, like most dedicated medevac operations, fully equips its aircraft to be a 'flying hospital' able to handle intensive care patients if need be. Its aircraft have:

- Portable ultrasound;
- Powered lifeport stretchers with built-in oxygen supply;
- Adult, paediatric and neonatal intensive care ventilators;
- Cardiac monitors and defibrillators;
- In-flight arterial blood gas analysis;
- Invasive and non-invasive blood pressure monitoring;
- Infusion pumps and syringe drivers;
- Suction units with back-up;
- Standard, rescue/immobilisation equipment and vacuum mattresses;
- Patient isolation medical unit for transportable VHF, SARS, Avian flu or other infectious diseases;
- Thrombolitics and snake bite anti-venom;
- Universal donor blood when required.

Air Rescue Africa is part of the International SOS network and accredited by both the Commission on Accreditation of Medical Transport Systems (CAMTS) and the European Aeromedical Institute (EURAMI).

a leading role in providing expert advice on the Ebola outbreak to organisations with customers or employees living or working in Africa.

The company says that 81% of the calls it received during July and August were concerning Ebola, with queries about Nigeria topping the list. Liberia, Sierra Leone and New Guinea followed.

Dr Irene Lai, medical director at International SOS, said: "The situation is rapidly and constantly changing, bringing new challenges. It is important that organisations understand and assess the current and potential risks for their staff and operations, not only in affected countries but globally too.



"The longer the outbreak continues to grow, the greater the risk of spread to other areas. We have not yet seen the peak of the epidemic."

In September, International SOS was behind the evacuation of two Dutch doctors who had been exposed to Ebola. They were transported from a remote location in Sierra Leone and then flown by an International SOS air ambulance from Freetown to Amsterdam in the Netherlands.

International SOS' African operations are headed by Air Rescue Africa, based in Johannesburg, South Africa.

Like AMREF, Air Rescue Africa travels all over the continent performing more than 700 air evacuations a year. It offers a 24-hour worldwide service, with three jets in its fleet – a Dassault Falcon 10 and two Learjet 35As, always carrying a doctor.

SOMMAIRE

Medevac subit le stress

L'épidémie d'Ebola est centrée sur l'Afrique de l'Ouest mais elle impacte tout le continent. Comme l'explique Dave Calderwood, de nombreux pays refusent des vols même lorsqu'il ne s'agit pas d'Ebola.

Les opérations de Medevac sont ainsi compromises sur toute l'Afrique. Selon Sean Culligan, chef des opérations de l'AMREF (African Medical and Research Foundation) Flying Doctors, « la majeure partie du monde perçoit l'Afrique comme un pays plutôt qu'un continent ».

De nombreuses personnes vivent et travaillent dans les zones touchées par Ebola et souffrent de maladies ou d'accidents sans aucun rapport avec le virus. Certains pays africains sont contre la mobilité des personnes émanant d'une région affectée.

Les clients et les compagnies d'assurance du monde, veulent connaître la position de Medevac car au nord de Johannesburg, c'est la seule ambulance aérienne accréditée au niveau international sur le continent. « S'il s'agit d'une maladie autre qu'Ebola, la question n'est pas seulement de savoir où emmener la personne mais surtout de savoir quel pays l'accueillera. Aussi, comment pouvons-nous garantir ce qu'a été ses mouvements durant les deux ou trois dernières semaines ? »

C'est une période difficile pour tous ceux impliqués au niveau médical en Afrique. Toutefois, les médecins de l'AMREF continuent d'opérer à travers une vaste étendue du continent comptabilisant environ 1000 évacuations et un million de miles annuellement. L'équipe de Nairobi travaille de concert avec celle basée en Australie pour exploiter une flotte de 17 avions sur appel dont des Cessna Caravan, des Beechcraft King Air et des Cessna Citation.



Environ 45 pourcent des évacuations concernent des accidents de la route en raison des conditions du réseau et des normes de conduite. Les voyageurs tombant malade ou qui contractent le paludisme à l'étranger de même que les expatriés, ont également recours aux services de Medevac.

Les défis d'exploitation sont d'autant plus grands car il faut être rapide et offrir des soins de qualité sur

de longues distances et dans des régions sans infrastructures médicales et parfois touchées par les conflits politiques et économiques.

Sean Culligan souligne par ailleurs que les responsables de l'aviation civile et de la sécurité intérieure réalisent qu'il s'agit de sauver des vies humaines.

Concernant Ebola toujours, International SOS, le leader mondial dans le domaine des services médicaux et de sécurité aux voyageurs, fournit des conseils d'experts sur l'épidémie à des organisations ayant des clients ou des employés vivant ou travaillant en Afrique.

Ses opérations africaines sont dirigées par Air Rescue Africa basée à Johannesburg, Afrique du Sud.

La compagnie opère en Afrique effectuant plus de 700 évacuations aériennes annuellement avec trois jets - un Dassault Falcon 10 et deux Learjet 35A, incluant toujours un médecin.



La voie des airs pour secourir la terre

Aviation Sans Frontières met ses moyens, son professionnalisme et ses compétences aéronautiques au service des causes humanitaires dans le monde. Vincent Chappard revient sur le travail remarquable de cette organisation, en particulier sur le continent africain, qui a choisi la voie des airs pour secourir la Terre. Elle symbolise l'aéronautique au service de l'humanitaire.

«ASF – the flying humanitarians» – Page 52

Depuis presque 35 ans, Aviation Sans Frontières (ASF) met en œuvre ses moyens logistiques et son expertise au service des Organisations Non Gouvernementales (ONG). Elle assure le transport aérien dans les zones critiques et difficiles d'accès.

ASF disposait d'un budget d'environ 4,5 millions d'euros en 2013 provenant essentiellement de cotisations des adhérents, de dons des particuliers et du mécénat des entreprises mais également de financements contractuels des Nations unies et d'autres ONG. L'association regroupe des hommes et des femmes passionnés d'aéronautique, décidés à aider leur prochain par compassion et générosité.

Aviation Sans Frontières assure avant tout des missions de transport aérien pour faciliter la distribution des secours et des aides d'urgence à des populations dont la vie ou la santé est menacée par des épidémies, des pandémies, des catastrophes naturelles ou des conflits armés.

Pour cela, elle fonctionne comme une compagnie aérienne européenne.

«Aviation Sans Frontières est la seule ONG européenne à être titulaire d'un certificat de

transporteur aérien (CTA) européen », souligne Pierre Lacorne, président d'ASF.

Ce certificat (CTA) permet en effet à ASF d'assurer des missions au service des plus grandes organisations soutenues par les Nations unies à travers le monde dont le Comité international de la Croix-Rouge (CICR), Médecins Sans Frontières (MSF), ou encore l'Organisation internationale pour les migrations (OIM). Il donne aussi des garanties sur la qualité et la fiabilité de ses avions, l'entretien de sa flotte ainsi que sur le professionnalisme de ses PNC et ses PNT.

ASF dispose de sa propre flotte d'avions. Elle est constituée de trois CESSNA 208B Caravan. Ce type d'avion permet de transporter neuf passagers, deux pilotes et une tonne de fret. ASF compte environ une vingtaine de pilotes. Ils sont hautement formés et viennent généralement piloter pour ASF en attendant d'être embauchés par des compagnies aériennes. La MRO est réalisée en Afrique par des ateliers européens qui ont la certification PART 145. C'est la société Avia Laval qui fait le déplacement sur place avec son personnel qui bénéficie de l'expertise des mécaniciens bénévoles d'Air France. ASF a monté un atelier MRO à l'aéroport d'Ndolo (Kinshasa)

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qui vient de recevoir les agréments PART 145 par la DGAC.

ASF a mené de nombreuses missions sur le continent africain que ce soit en Ouganda, au Mali, au Mozambique, en Ethiopie, au Soudan, en Côte d'Ivoire, en Guinée-Bissau, en Angola, à Madagascar, au Tchad, au Niger, en République Centrafricaine, au Rwanda. Elle intervient également dans d'autres parties du monde comme en Arménie, au Cambodge, au Bangladesh, en Honduras, au Kosovo ou aux Philippines.

Les missions d'ASF sont actuellement davantage déployées pour lutter contre l'épidémie de maladie à virus Ebola en Afrique de l'Ouest.

ASF intervient en République démocratique du Congo (RDC) depuis plusieurs années. Elle assure des liaisons depuis Kinshasa, Mbandaka, Boende, Bukavu et Goma. L'association est l'unique acteur avec l'ONU (via son service aérien humanitaire l'UNHAS) à gérer le transport aérien pour répondre à cette urgence sanitaire. Là où par bateau, un trajet s'effectue en trois jours pour rejoindre Boende, les pilotes permettent aux équipes de faire le trajet en une heure. A noter que les pilotes d'ASF sont protégés et suivent des consignes sanitaires strictes. Les passagers sont également soumis à un contrôle sanitaire et les appareils sont désinfectés régulièrement.

Le coordinateur de l'action humanitaire en RDC, Moustapha Soumaré, a annoncé la fin de l'épidémie Ebola qui touchait depuis le 24 août la zone très enclavée et mise sous quarantaine de Djera. Par conséquent, ASF a annoncé que sa mission prendra fin en décembre 2014. L'équipe d'ASF a effectué pour l'ONU 76 vols, transporté 100 experts et spécialistes sanitaires et plus de 18 tonnes de médicaments, de matériel médical et de nourriture pour 12 organisations humanitaires et internationales.

ASF compte se déployer à Conakry en support aux actions de la Croix-Rouge. Des missions sont également prévues au Soudan du Sud et en Afrique de l'Ouest.

SUMMARY

ASF – the flying humanitarians

For almost 35 years, ASF has worked for non-governmental organisations (NGOs) providing air transportation in critical areas.

It had a budget of approximately €4.5 million (\$5.5m) in 2013, mainly from membership fees, donations from individuals and corporate sponsorship, but also contractual funding from the UN and other NGOs.

The association brings together men and women passionate about aviation, determined to help others with compassion and generosity.

ASF primarily provides airlift missions to facilitate the distribution of relief supplies and emergency aid to people whose life or health is threatened by epidemics, pandemics, natural disasters or armed conflicts. For this, it functions as a European airline.

"ASF is the only European NGO to hold a European air operator certificate (AOC)," said president Pierre Lacorne. This makes it possible to service larger organisations supported by the UN around the world, including the International Committee of the Red Cross (ICRC), Médecins Sans Frontières (MSF) or the International Organization for Migration (IOM).

It also provides guarantees on the quality and reliability of its aircraft and maintenance of its fleet.

ASF has its own fleet of aircraft consisting of three Cessna 208B Caravans, which can carry nine passengers, two pilots and a tonne of freight. It has about 20 pilots, who are usually flying for ASF while waiting to be hired by the airlines.

It has conducted numerous missions in Africa, including Uganda, Mali, Mozambique, Ethiopia, Sudan, Côte d'Ivoire, Guinea-Bissau, Angola, Madagascar, Chad, Niger, the Central African Republic and Rwanda. It also operates in other parts of the world including Armenia, Cambodia, Bangladesh, Honduras, Kosovo and the Philippines.



Par ailleurs, ASF participe à des programmes de réinstallation de groupes de réfugiés en les convoyant sur les lignes régulières de compagnies aériennes vers leur nouveau pays d'accueil. Ils sont alors pris en charge par d'autres associations qui prennent le relais.

ASF mène également de nombreuses actions au niveau du fret humanitaire et en particulier de l'acheminement de colis (médicaments, matériel de survie, matériel médical et chirurgical). Elle a également des missions « lait » permettant de distribuer chaque jour, soit un verre de lait ou une bouillie lactée, à plusieurs milliers d'enfants malades ou dénutris.

Enfin, ASF a développé des opérations « Les Ailes du Sourire » en France proposant à de jeunes personnes handicapées ou socialement isolées des journées de découverte aéronautique. Les journées « e-Aviation » invitent des jeunes des quartiers et des écoles à venir découvrir le monde de l'aérien.

La tâche principale d'ASF est de pérenniser ses interventions. Elle œuvre avec discrétion mais efficacité pour soutenir les populations dans la durée et permet d'agir rapidement par la voie des airs pour porter secours aux plus démunis au cœur des pays en voie de développement.



Pierre Lacorne : le rôle de l'ASF

Vincent Chappard revient avec Pierre Lacorne, président d'Aviation Sans Frontières sur la vocation, les besoins et les missions de l'association en Afrique pour lutter contre le virus Ebola.

■ *Quelle est la vocation d'Aviation Sans Frontières (ASF), son ADN ?*

La vocation d'ASF, c'est d'aider les personnes à travers le monde qui ont des besoins, qui souffrent de la pauvreté et qui sont confrontées à la maladie et parfois à la guerre. ASF fournit le transport aérien pour les ONG et les associations humanitaires afin de convoier des personnes, des produits d'urgence et des médicaments. C'est avant tout un état d'esprit humaniste, de partage et d'entre-aide vis-à-vis des plus démunis que l'on retrouve dans notre famille aéronautique.

■ *Quelles sont ses principales actions sur le continent africain ?*

Nous sommes présents en République démocratique du Congo depuis plusieurs années. Nos missions de transport aérien sont également dédiées à la lutte contre le virus Ebola. Nos trois avions opèrent à partir

de Mbandaka, Boende, Bukavu et Goma. Nous assurons par exemple le transport aérien pour Médecins Sans Frontières et la Croix Rouge pour traiter un foyer Ebola à Boende. C'est de là que le virus est parti il y a 30 ans. Nous assurons aussi des missions de fret humanitaire vers Madagascar. ASF a envoyé en novembre dernier, 15 tonnes de lait en poudre par bateau. Madagascar fait partie des destinations d'Afrique, comme ailleurs dans le monde, où notre association envoie du lait, des médicaments, des produits d'urgence ou du matériel chirurgical.

■ *Quelles sont les prochaines missions d'ASF ?*

Nous sommes prêts à envoyer notre 3ème avion sur la ville de Conakry pour opérer dans les trois pays où sévit encore Ebola. La Croix-Rouge est en train d'aménager un centre de traitement dans les zones contaminées, en particulier dans la région de Macenta (Guinée), nous attendons le feu vert pour

partir. Nous travaillons aussi avec des organisations humanitaires sur de possibles missions au Soudan du Sud et en Afrique de l'Ouest.

■ *Quelles sont les attentes vis-à-vis de l'industrie aéronautique africaine ? Avez-vous un message pour nos lecteurs ?*

ASF est bien sûr à la recherche d'aides matérielles et financières pour pérenniser ses missions. Le coût du transport aérien reste élevé. Cela représente environ 2000 dollars par heure de vol pour nos avions qui cumulent environ 100 heures par mois. Nous recherchons aussi un support technique dans les endroits où on va opérer. Nous serons également ravis d'accueillir des pilotes africains dans notre équipe à condition qu'ils possèdent une licence européenne. Nous pourrions leur donner une formation complémentaire si besoin pour qu'ils puissent voler sur nos avions.



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Fireblade's FBO building is designed for passengers who will often be waiting for a scheduled flight with safari companies. It thus has large lounges and meeting areas (left).

December 2014 saw the opening of Fireblade, a new FBO at Oliver Tambo International Airport in Johannesburg. Ian Sheppard spoke to director, Jonathan Oppenheimer.

FIREBLADE BLAZING A TRAIL

Fireblade is effectively the first business aviation fixed-base operator (FBO) at Africa's leading (and busiest) airport, OR Tambo International in Johannesburg, South Africa.

Formally opened on December 10, it has been established by the aviation-mad Oppenheimer family, utilising a new terminal building and existing vast hangar (that could have housed three Airbus A380s, had SAA ordered them).

The FBO is set to quickly attract clients and to put Jo'burg International (JBO) on the business aviation map.



Jonathan Oppenheimer, director, said the Fireblade FBO, fulfils a long-held dream for his family – a family that is intrinsically linked with the world of diamond mining (De Beers and Anglo American) and, through the Anglo aircraft fleet over several decades, aviation too.

In fact, the family's own corporate flight department has now separated from Anglo American's.

Both now claim to be "the oldest corporate flight department in the world, at about 77", but



Jonathan Oppenheimer: "We want to gear up to handle 50 people an hour."



Oppenheimer was, of course, keen to claim the title for Fireblade.

In reality, they may have to share the honour. It is a claim that has been backed up by the National Business Aviation Association (NBAA), he added, although the association has not been asked to decide whether Fireblade can now stake the claim. That aside, Oppenheimer said that the idea of setting up an FBO at Johannesburg goes back "at least 20 or 30 years" and his family's newly separate aviation department has taken that leap first.

History may favour the Oppenheimers, too, as the "start of it all" was when Jonathan's grandfather flew a DeHavilland Rapide to the Congo with general Jan Smuts of South Africa. Over the years a number of different types were operated in support of the family's business interests including, eventually, King Airs and Gulfstream jets (starting with the first Gulfstream in Africa, a Gulfstream One).

What is now Fireblade (having adopted its accounting name from the family holding company) currently has four aircraft, a Bombardier Learjet 45, a Bombardier Global Express, a Pilatus PC-12 and an AgustaWestland AW139 helicopter.

"We just got rid of our Gulfstream G550," said



**“We
are aiming to
be a top 10 world
FBO..”
JONATHAN
OPPENHEIMER**

Oppenheimer, who was very sad to see it go and break the long link with the Savannah, Georgia-based manufacturer.

He accepts that Fireblade is now in direct competition with ExecuJet’s FBO at Lanseria Airport, further out of Jo’burg, but believes there is room for growth all round.

However, he firmly believes that JBO has the upper hand. Among other advantages, fuel prices there are 20% less than those at Lanseria as Jet A comes via a pipeline rather than in tanker trucks, he claimed.

Oppenheimer said that investment in the Fireblade facilities at JBO so far had amounted to \$15 million, and that all approvals were in place apart from immigration and customs, which at the time of writing was expected any day (by late 2014).

The land and buildings are leased from South African aerospace company Denel. The “huge hangar” had originally been built for envisaged airliner and military aircraft MRO activity that never materialised.

The main target markets, said Oppenheimer, include business aircraft operators whose passengers wish to have an alternative to the main

passenger terminals. Many such visitors are about to head out on safari, so can go straight to their transfer shuttles, avoiding queuing with airline passengers.

Oppenheimer said that many of the tour operators have their own aircraft to fly out to the camps in game reserves, but they are like scheduled services, so passengers tend to have quite a bit of time to wait on a connection. For this reason, the second floor of the new FBO has a restaurant, spa, showers, meeting rooms, an operations room, gym, a board room and so on.



He added that government aircraft would also be welcomed, as the airport was more convenient for many than Lanseria, although the South African presidential flight is at Waterkloof Air Force Base, near the capital Pretoria. For most operations, though, it makes sense to use JBO “as 80% of South Africa’s air movements originate at Johannesburg”, said Oppenheimer

There are some third-party operators already using the facility, such as Air Fix, which has two Dornier 328JETS used in the energy market,

while a second client “has a [Cessna Citation] Sovereign and a Hawker 400”.

Oppenheimer said: “We’re looking to entice more. We feel we’re about half way there, with six or seven other contracts on the table.” Throughput-wise, he added, “We want to gear up to handle 50 people an hour.”

The FBO’s main hangar has 20,000sqft of offices as well. Engineering services will not be provided but tenants are welcome to maintain their aircraft in the hangar, he said.

The family is not seeking to start FBOs around Africa and, in fact, Fireblade has a “unique” structure in giving employees 50% profit participation.

“We are aiming to be a top 10 world FBO [in the *Aviation International News* FBO Survey],” said Oppenheimer, suggesting that he viewed the quality as in the same league as the likes of TAG Farnborough.

Although it is the “first and only” FBO at OR Tambo Airport, Oppenheimer admitted that others could go for the same approvals, although they took some years to obtain, not to mention finding the land and obtaining the permission and funding to build. So for now it seems Fireblade is a “no brainer.”



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Bell is ringing up the African orders

«Des commandes africaines pour Bell? » – Page 59

John L Garrison, Bell Helicopter's president and CEO, spoke to African Aerospace in the run-up to the eighth African Aerospace and Defense (AAD) exhibition at Air Force Base Waterkloof, near Pretoria. In that interview, published in the last edition, Garrison explained why Africa was such an important focus and briefly outlined the company's presence in the region. In this issue we look at recent changes to Bell's products and programmes that promise to affect the African market.

Though the military V-22 tilt-rotor is unlikely to find customers in Africa, John L Garrison is proud of the fact that US forces have used it in the northern half of the continent for some time, demonstrating its capability in terms of payload, speed and range.

"Africa is a huge continent and the capabilities of the V-22 to traverse such a large land mass has been clearly demonstrated," he said. "It's causing a lot of nations to notice the revolutionary capability that the V-22 brings."

Garrison was expecting a first export customer (in the Middle East) to be announced as *African Aerospace* was going to press, and said further deployments to the African continent by US military V-22s were inevitable.

More likely to find military customers in Africa is the Bell 407, already in widespread use on the continent thanks to its blend of ruggedness, reliability and excellent hot and high performance.

In 2012 Bell, in conjunction with local partner National Airways Corporation, began demonstrating the 407AH light-armed scout helicopter – which was said to be specifically designed to meet the needs of African nations. It combined a Garmin G500H cockpit with the proven weapons mounting system of the OH-58D Kiowa and a simple, proven, stand-alone weapons management system manufactured by Grigg Technologies, together with a FLIR Ultra 9HD thermal/infrared (IR) sensor system in the nose.

Bell has recently upgraded the Model 407 with

a Garmin G1000 cockpit to produce the 407GX, and this updated aircraft is also available in an armed scout configuration as the 407GT, with two 10.4in high-resolution LCD screens and a third Aerocomputers display for showing infrared images.

"The US Government sold an armed variant to the Iraqis and they are using it as we speak," said Garrison. "We've sold other 407s to undisclosed customers that have also armed the aircraft, which really is cost-effective. It gives a customer the opportunity to have a light attack helicopter that also keeps it in the light utility-based configuration. With that degree of flexibility, I think there's going to be opportunity for us throughout Africa for armed forces use."

□□□□□

In July 2014, the company conducted a series of Bell 407GT and Bell Huey II helicopter demonstrations in Jordan and Saudi Arabia in response to growing interest in the aircraft from the Middle East and African markets.

The Bell 407GT was demonstrated with an L3 Wescam MX10 EO/IR sensor (though it is also offered with the Wescam MX-15DI and the FLIR Systems 230-H); a Dillon Aero M134D mini-gun; and BAE Systems' advanced precision kill weapons system (APKWS)-equipped 70mm Hydra rockets. Both weapons were used in a live fire demonstration at Amman.

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Bell is also finding African customers for the newest civilian versions of the Model 407. The company's independent representative in South Africa – National Airways Corporation – delivered the first Bell 407GX to be operated in Africa to a private customer in August 2012, for corporate use.

The company has also upgraded its Model 412. Garrison described it as having been “an absolute workhorse around the world for many years”. He added: “Again, it needed to be updated, so we've given it a fully integrated digital glass cockpit to produce what we call the 412EPI.”

The Model 412 has proved popular throughout Africa and the new EPI promises to follow on from that success.

Bell has brought the 429 to market and has delivered more than 200 aircraft around the globe, proving to be a very successful programme in the vital light twin market segment. Last year the company announced a wheeled variant of the 429, which promises to further increase the aircraft's customer appeal.

The company made its first Model 429 deliveries to customers on the African continent in February 2012, delivering one to the Nigeria Police Air Wing (NPAW) and another to the Nigeria Emergency Management Agency (NEMA).

Bell also has two major on-going commercial development programmes, both of which will produce helicopters that are likely to find plenty of customers in Africa. Garrison believes that the new 16-passenger Model 525 Relentless (which the company calls the “world's first super medium helicopter”) will find a ready market in Africa. He envisages the new type “working with global operators and with local operators in west African offshore oil and gas operations thanks to the unparalleled capabilities that it has, and being the first fly-by-wire commercial helicopter”.

He added: “With its range and payload capabilities it will also have a very strong market segment in the search and rescue mission, and as a VIP/VVIP transport aircraft. To some extent all three segments can be served in Africa.”



But of all of its new and refreshed helicopter models, it is the Model Jet Ranger X that seems likely to find the greatest success in Africa. The company used the eighth Africa Aerospace and Defense (AAD) exhibition to showcase its new helicopter, where a detailed full-scale mock-up formed the centrepiece of Bell's participation in the exhibition.

The mock-up featured an unusual level of detail and was fully representative of the real aircraft, affording existing Bell 206 operators

The Bell 407GT can be fitted with an L3 Wescam MX10 EO/IR sensor, Wescam MX-15DI or the FLIR Systems 230-H (pictured).



“The Bell 505 has undoubtedly been the star of the show and its reception has been remarkable.”

MARTIN BANNER

and potential customers the opportunity to see the new type's capabilities and spacious cabin in person, and generating great excitement.

Within a week of the exhibition's close, Bell announced that it had secured contracts to supply 14 505 Jet Ranger X (JRX)

helicopters to customers in the African region, with nine orders signed during AAD itself. Most of these were to individual private pilots and single-helicopter operators, and Bell expressed the hope that these customers would be “the first of many throughout Africa who would be able to accomplish their missions with this newly designed helicopter”.

Total orders for the rotorcraft are now “closing in on 250” according to Bell, with 40 of these coming from Europe.

Steve Suttles, Bell Helicopter's managing director in the Middle East and Africa, described the Bell 505 as being “perfectly suited for the missions that are most commonly operated in this region, especially corporate transport, game management and training”.

Bell has produced nearly 7,400 Model 206 helicopters since 1967 and more than 4,400 of them remain in service today, many of them needing replacement. The company estimates that there are more than 170 Bell 206 JetRangers operating in Africa, with nearly all of them more than 20 years old.

Before the show, Suttles said that he was “excited about having such a great opportunity to expand our presence in Africa and allow our regional customers the chance to see the Bell 505 Jet Ranger X mock-up”, and that he was “excited to showcase this modern commercial product and generate new excitement and growth opportunities, especially for our

customers currently operating older Jet Ranger models”.

Martin Banner, CEO of South Africa's National Airways Corporation (NAC), one of Bell's four independent representatives in the African region, shared this enthusiasm. He said: “The Bell 505 has undoubtedly been the star of the show and its reception has been remarkable.”

NAC is celebrating its 25th year representing Bell Helicopter in South Africa and Banner expressed his belief that: “nothing could be more fitting in celebration than to introduce the Bell 505 JRX to our market at AAD”.

He said that NAC looked forward to many more years of partnership and success with Bell Helicopter, particularly as it continues to roll out “exciting new commercial products” like the JRX and the Bell 525 Relentless.

The single-turbine market is a large and growing one but it is also a particularly hard-fought segment, with a number of competing designs. These include AgustaWestland's AW119 Koala, Airbus Helicopters' EC120, Enstrom's 480, the MD Helicopters MD500, the Sikorsky (Schweizer) S-333/434, and Robinson's game-changing R66.

Bell has been working on a replacement for the best-selling JetRanger for many years and a four-bladed JRX concept was revealed at Heli-Expo in February 2002. This had a more streamlined shape and a wider glazed cabin than the Model 206, with seating for five or six passengers. Provisionally dubbed the LoadRanger, this aircraft had more in common with the heavyweight Model 407 than with today's lighter weight and more affordable JRX.

This early JRX proposal went no further but, with growing competition from the Eurocopter EC120 and the Robinson R66, Bell refined its ideas of what its new light single-engined helicopter should be, and launched the current



JRX in 2010, after delivering its last Model 206B3 JetRanger.

Bell made an unprecedented effort to listen to its customers, undertaking an iterative consultation process with its global customer advisory panel in order to determine exactly what the market was looking for in a new single-engined light turbine helicopter.

The success of the low-cost Robinson R66 (Robinson's first turbine-engined helicopter) led to a concentration on price for what became known as the short light single (SLS). With a target price of \$1.07 million, Bell hoped to offer improved product capabilities – with best-in-class speed and load performance and a glass cockpit, while remaining relatively close to the Robinson R66's \$839,000 price tag.



Bell's Model 505 JRX programme manager, Paul Watts, said that meeting the target price for the aircraft would be critical to the SLS's success. "It is clear who the market leader is. All of the manufacturers in this segment except Robinson (which delivered 191 aircraft) supplied 40 aircraft last year. The biggest differentiator Robinson has is price, and designing to a competitive price is the most important factor for our team."

Bell has, therefore, worked hard to come close to the price of the Robinson R66, while offering superior capabilities. These include best-in-class speed and load performance, an advanced glass cockpit, the Garmin G1000H integrated avionics system first introduced by Bell on the Model 407GX, exceptional pilot visibility, full authority digital engine control (FADEC), and a fully flat 22sqft cabin floor with five forward-facing seats and rear clamshell doors, and with no 'broom closet' between cockpit and cabin.

Blending modern modular monolithic airframe structures with proven engine and drive-train technologies further ensured low costs.

Bell finally unveiled its new short light single (SLS) during the Paris Airshow in June 2013, and formally launched the new helicopter as the Bell 505 Jet Ranger X at HAI's 2014 Heli-Expo in February 2014.

The new 505 JRX bears a family resemblance to the bigger Model 525 Relentless, streamlined and 'cleaned up' and with a blunter nose profile than the original JetRanger.

Though it uses a 500-series designation, whose initial numeral would normally indicate the number of main rotor blades – like the five-bladed Model 525 Relentless – the 505 JRX is, rather confusingly, a lightweight successor to the Model 206 JetRanger, and is equipped with a similar twin-bladed high inertia main rotor (actually taken from the Bell 206L4, albeit with improved torsion-tension straps and a redesigned system for mounting the rotor and dampening vibrations).

This promises to give the Bell 505 the same renowned auto-rotational characteristics and capabilities as the original JetRanger.

The new aircraft uses a Turbomeca Arrius 2R engine with dual channel FADEC, which Bell believes offers a number of advantages over the Allison 250 used by the Bell Model 206, in terms of time between overhauls, specific fuel consumption and design simplicity.

The new type will be manufactured at Bell's new plant at Lafayette Regional Airport in Louisiana, USA.

The Model 505 has only been offered in commercial and parapublic forms so far, though Bell is understood to be considering the possibility of offering it as a primary military trainer in Africa and Asia.

SOMMAIRE

Des commandes africaines pour Bell?

John L. Garrison, président-directeur général (PDG) de Bell Helicopter, s'est entretenu avec le magazine African Aerospace lors du lancement de la 8ème édition du salon de l'AAD à la base militaire sud-africaine de Waterkloof, près de Pretoria.

Bien qu'il est peu probable que l'hélicoptère V-22 trouve des clients en Afrique, John L. Garrison est cependant fier de son utilisation par les forces américaines dans la partie nord du continent. Selon lui « l'Afrique est un grand continent et les capacités du V-22 ont été clairement démontrées ».

Le Bell 407, déjà très répandu en Afrique pour sa fiabilité, sa robustesse et sa performance, est plus enclin à trouver des clients militaires sur le continent. Il a récemment été modernisé et les versions 407GX et 407GT sont désormais disponibles. Bell Helicopter a mené une série de démonstrations en vol du Bell 407GT et du Bell Huey II afin de répondre à l'intérêt croissant du Moyen-Orient et des marchés africains. Bell Helicopter a également mis le Bell 429 sur le marché.



Bell Helicopter mène des campagnes commerciales autour de deux programmes majeurs susceptibles d'intéresser de nombreux clients en Afrique. Le premier est le nouveau Bell 525 et le second, le Bell 505 Jet Ranger X qui a été exposé au salon de Pretoria. Bell Helicopter a d'ailleurs annoncé des contrats fermes pour 14 hélicoptères 505 Jet Ranger X (JRX) à des clients opérant en Afrique. La société estime que plus de 170 Bell 206 Jet Rangers de plus de 20 ans opèrent sur le continent.

Le marché des hélicoptères mono turbine reste important pour Bell Helicopter. C'est un secteur en croissance mais très concurrentiel.

Bell Helicopter travaille depuis de nombreuses années sur le remplacement du Jet Ranger. Il s'agit du concept JRX révélé lors du salon Heli-Expo 2002. Bell Helicopter a aussi officiellement lancé le nouveau Bell 505 Jet Ranger X au salon Heli-Expo 2014.

Bell envisage la possibilité de proposer ce modèle comme un avion d'entraînement militaire en Afrique et en Asie.

Abyssinian Flight Services (AFS) is a pioneering private airline that provides domestic charter flight services in Ethiopia and to neighbouring east African countries.

Kaleyesus Bekele talked to AFS owner captain Solomon Gizaw in Addis Ababa.

THE PIONEERS' CORE...

Ethiopian pilot, captain Solomon Gizaw, is AFS' owner and managing director. He served the Mission Aviation Fellowship (MAF) – an aviation company that provides flight services for missionaries in remote areas – for 12 years, flying a light aircraft in both Haiti and Uganda.

In 1997, Gizaw was assigned a mission in Ethiopia; he had been away from home for 15 years. After flying for a year in Ethiopia, MAF had to leave the country. Gizaw, who missed his motherland, decided to stay.

In 1998, he established the second private airline in Ethiopia – AFS – with one Cessna Caravan he secured from MAF. The lease purchase agreement was supposed to last for eight years.

Gizaw started the company with one million Ethiopian birr (\$50,000) capital and a couple of employees. “We succeeded in settling the payment in five years,” he said proudly.

AFS primarily provides charter flight services for UN agencies. It serves international aid organisations, the Ethiopian Government (VIP flights to remote areas), and tourists. It also provides air ambulance and aerial survey services.

The airline flies to all corners of Ethiopia, neighbouring Somaliland, Somalia, Djibouti, Kenya and South Sudan. Today it operates four Grand Caravan aircraft and employs 70 Ethiopian nationals.

“The Ethiopian aviation market has a tremendous potential. We are starting from scratch,” Gizaw said. “We lack

roads. We do not have a railway network and the country is mountainous. Aviation is the best alternative to travel in Ethiopia.”

The Ethiopian economy has been growing in double digits for the past six years. Commercial farming, oil and minerals exploration, tourism and construction are booming.

“If you take the construction industry, we deliver aerial survey services. It takes six months to conduct a survey in a certain construction project. But we accomplish the same task in only one week,” Gizaw said.

“We take tourists to remote areas and bring them back to Addis Ababa on the same day. With our Grand Caravans we can land almost anywhere.”

Last year AFS recorded revenue of \$4 million.

The company chalked up a milestone in 2007 by establishing the first private pilot training school in Ethiopia. Until AFS' Abyssinian Pilot Training School was created, it was only Ethiopian Airlines that ran pilot training in the country.

Abyssinian Pilot Training School began operation with one Cessna 172 trainer aircraft, one instructor and two students. Today, the school has eight trainer aircraft – five Cessna 172s, a Diamond single-engine DA40, and two Diamond twin-engine DA42s. It also acquired a Diamond aircraft simulator two years ago from the Austrian light aircraft manufacturer, Diamond Aircraft Industries.

So far 100 pilots have graduated from the school. The company offers private pilot

licence (PPL) and commercial pilot licence (CPL) courses with instrument and multi-engine ratings. The Ethiopian Civil Aviation Authority (ECAA) approves the training programmes.

A full commercial pilot training course takes 12-15 months and costs a cadet pilot \$48,000. The majority of the tuition is used to cover the high cost of aircraft fuel.

Captain Amare Gebrehana, AFS deputy managing director, said Abyssinian Pilot Training School had reached a level where it could not accommodate the ever-increasing demand from Africa, Europe and the Middle East with the current capacity.

□□□□□

“Recently we were asked to train 180 cadets from an African country. For the time being we have adequate number of trainer aircraft. But we need to own our own building, have students accommodation and other facilities,” he explained. “There is a huge demand for pilots globally and there is room for growth,” he added.

Currently, the school offers the training in a rented building near the Addis Ababa Bole International Airport, while it uses the airport for practical lessons. It now has 35 students from South Sudan, Sudan, Kenya, Libya, China and Ethiopia and eight instructors. Recently, it got a green light from the ECAA to start training instructors.

The school is in the process of signing an agreement with a renowned US university that enables it to offer training for aviation cadets through correspondence. “Our cadets will not only be pilots but also can have a degree in

“We lack roads. We do not have a railway network and the country is mountainous. Aviation is the best alternative.”

CAPTAIN SOLOMON
GIZAW



The domestic aviation industry is reserved for Ethiopian nationals, and private airlines are not allowed to operate aircraft with more than 50 seats.

aviation from a recognized US university. The agreement will be signed soon,” Gizaw said.

The road has not all been easy for Gizaw and his colleagues. “The biggest challenge is that there is no understanding of the aviation industry by the government officials. They do not appreciate what we (companies engaged in general aviation) are doing. Although we see a marked positive support from the ECAA, we still have a very long way to go to get a much-needed full understanding by all stakeholders to enable us to exploit the ripe aviation opportunities in Ethiopia,” Gizaw said.

“For instance, we asked the Ethiopian Airports Enterprise (EAE) 15 years ago to grant us a space at Addis Ababa Bole International Airport where we could build a maintenance hangar. But it was only recently that we signed the agreement. Since we do not have a hangar, we take our aircraft to Kenya for scheduled and non-scheduled maintenance overhaul, annually spending \$40,000-50,000.

“I do not expect the government to know everything about the aviation sector but the ECAA

and the EAE, that directly work with us, are not helping in getting our message through so that we can play a catalyst role in the economic growth of Ethiopia.”

According to Gizaw, Kenya, Tanzania and Uganda have well developed general aviation sectors.

“Ethiopian aviation history is 80 years old but we lag far behind African countries that started it after independence.

“We [private airlines] generate the much-needed foreign currency by providing charter flight services. At the same time we support the development of the tourism sector. If we are not doing this work, foreign companies will come and take the job.”

According to Gizaw, access to aircraft financing is another problem. “Both the state-owned and private banks do not have a clue about the aviation sector. It was only recently that we started working with one of the private banks.”

The Ethiopian aviation industry is highly regulated. There are 15 registered private airlines in Ethiopia but only six of them are operational. All of them provide charter flight services except

Trans Nation Airways (TNA), which started scheduled flight services to two domestic destinations in October 2014.

Only state-owned Ethiopian Airlines (and now TNA) operate domestic flight services. The domestic aviation industry is reserved only for Ethiopian nationals, and private airlines are not allowed to operate aircraft with more than 50 seats.



Private operators have been complaining about these restrictions and are also unhappy with the airport service at Bole International Airport.

“There is only one runway and we share it with big jetliners, such as the Dreamliner and B777. There is no alternative airport for general aviation,” Gizaw said.

For Gizaw, the seat limit is ridiculous. “Why can’t I operate B737 aircraft? Aircraft that have 50 seats are old. It is difficult to run a profitable airline while operating a 50-seat aircraft.”

Gizaw revealed that he has a dream to establish a real low-cost airline that served both domestic and regional routes. “If the investment climate is improved I will keep AFS as it is and establish a real low-cost carrier,” he said.


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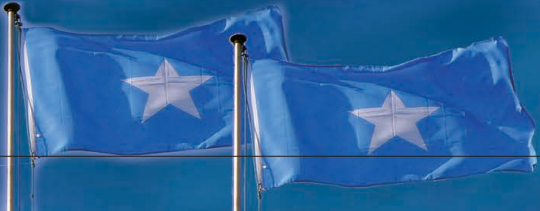
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With Somalia enjoying its most stable period in recent history, Martin Rivers and Ian Billingham travelled to Mogadishu to witness the progress first-hand.



SOMALIA ON THE ROAD TO RECOVERY



«Vers la stabilité et le redressement » – Page 66

*Somali transport minister Said Korsbel (left) talks to **Martin Rivers** about the crucial role that aviation is playing in his country's redevelopment, and what prospects flag-carrier Somali Airlines has of returning to the skies.*

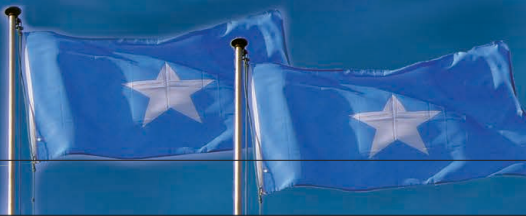
In most places around the world, working in civil aviation would not be considered an especially dangerous calling. However, Somalia is not most places. On September 20, shortly before *African Aerospace* travelled to Mogadishu for this special report, Ali Mohamed Ibrahim, the general manager of Somalia's civil aviation authority (SCAMA), was attacked by gunmen en route to his office.

The assassination attempt killed his driver and bodyguard but Ibrahim managed to escape with his life. He is now receiving medical treatment in Istanbul, and we wish him well.

Such incidents are, regrettably, not uncommon in Somalia. Just two years ago, Ibrahim Iman Halane, the managing director of Mogadishu's Aden Adde International Airport, was killed in another presumed attack by Al Shabaab, the militant group spawned from Somalia's former ruling Islamic Courts Union.

Despite losing most of their urban power bases in recent years, the jihadists continue to wage guerrilla warfare across the country with a brutal campaign of suicide bombings, shootings and kidnappings.

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Somalis, however, are unlikely to be cowed by such threats. Having endured two decades of civil war since the collapse of Siad Barre's regime in 1991, they are steadfastly rebuilding the institutions that most countries take for granted. A new federal parliament was established in August 2012, with lawmakers choosing Hassan Sheikh Mohamud as their president.

While the political process gathers steam – national elections are now planned for 2016 – members of the Somali diaspora are flocking back in ever-greater numbers, eager to play their part in rehabilitating the war-ravaged country.

They are emboldened by seeing the tangible difference that other returning Somalis have already made.

"I came back to the country in 2004. Before then I lived in Canada since 1991," said transport minister Said Korshel.

"Now, my sister is an MP. My wife is an MP. The reason we came back is just to help the country try to recover, to do the best we can. As the minister of transport I was very happy to see the changes there have been... in the media, you cannot really feel what's going on in the country."

Though no-one in Somalia takes security for granted, Korshel's family background has served him well. His father, Jama Korshel, was a major general in the army and the head of Somalia's police force.

After launching his political career in the

north-eastern region of Puntland, his indigenous homeland, the younger Korshel quickly rose through the ranks on the national stage. Ministerial postings for sports and youth, environment and livestock, and agriculture earned him his stripes. But it was a promotion to the transport ministry in January 2014 that sharpened his focus on the power of aviation.

"Outside Mogadishu there are no real roads, so civil aviation is very important in Somalia," he explained. "Each local city is making its own airstrip, so you can fly from Mogadishu to any location in the country. There's a lot of Somalis who are now investing in small planes to make these connections."

For the Somali diaspora – centred on the United Kingdom, Scandinavia and North America – aviation also provides a crucial connection with the homeland.

It is a connection that, for now at least, is served exclusively by Turkish Airlines, the only major international carrier flying to Mogadishu.

"When you see Turkish Airlines going to Somalia, it becomes the same as going to New York, London, Dubai," Korshel emphasised. "It gives Somalia a safe reputation, which is really important. We are so grateful to Turkish Airlines for this. Otherwise nobody would come here. They took the risk, and they showed that it's safe."

Turkey's flag-carrier launched its twice-weekly service from Istanbul in March 2012, later boosting frequencies to four

times weekly and incorporating a stopover in Djibouti.

Kayhan Bilgili, Turkish Airlines' country manager for Somalia, said load factors on the route are strong and it could become a daily service.

"Istanbul works perfectly," Korshel added, referring to the mega-hub's huge intercontinental network. "The next day you can go to anywhere you want. Wherever Somalis live, they should be connected [to their homeland]. That's the priority for us."

While Istanbul serves as a bridging point for Europe and North America, two regional hubs open up the rest of the world to Mogadishu.

Dubai unlocks easy connections with the Middle East and Asia, and is served by all three of Somalia's home-grown carriers – Jubba Airways, African Express Airways and Daallo Airlines. Nairobi, meanwhile, facilitates onward travel to southern, central and west Africa. It is again served by all three domestic carriers, as well as Fly-SAX, a subsidiary of Kenya's Fly540.

Scheduled flights are operated to just four other foreign cities – Djibouti, Aden, Jeddah and Sharjah – while about one third of all departures from the capital are domestic services. The main destinations are Kismayo in the south, Hargeisa, Bosaso and Berbera in the north, and Baidoa and Galkayo in central Somalia.

Ethiopian Airlines is only other scheduled foreign operator in Somalia, serving Hargeisa, the capital of the semi-autonomous north-western region of Somaliland.

But, following two years of trouble-free operations by Turkey's flag-carrier, a growing number of airlines are now evaluating the Somali capital.

"After Turkish Airlines started to fly here, it opened the way for international flights," confirmed Mohamed Egal, the deputy general manager of SCAMA. "It created a lot of confidence among the other commercial airlines. They are willing to come and do business in Mogadishu; they see opportunities in Mogadishu."

Bilateral agreements have been updated with Egypt, Kenya, Ethiopia, Rwanda, Yemen, the United Arab Emirates and Oman. Talks, meanwhile, continue with Uganda following last summer's grounding of Air Uganda, which had flown from Entebbe to Mogadishu.

Pressed to identify specific airlines considering route launches, Egal noted that Flydubai, the short-haul affiliate of Emirates Airline, has sent delegations to Mogadishu "several times" to review its security arrangements. Flydubai is rapidly expanding across east Africa, having last

Olgan Bekar:
projects will take years, even decades, to deliver meaningful change to the impoverished country.



TURKISH AIRLINES – SOMALIA'S BIG BROTHER

The decision by Turkish Airlines to begin serving Mogadishu in March 2012, although seemingly risky, was not unexpected.

Seven months previously, Turkey's then-prime minister, Recep Tayyip Erdogan, had made clear his commitment to Somalia by becoming the first non-African leader to visit Mogadishu in nearly two decades. His arrival came within days of Al Shabaab abandoning its bases in the capital.

With Somalia's institutions in disarray following two decades of civil war, efforts by the country to get back on its feet were always going to rely heavily on support from the international community.

Turkey put itself firmly at the vanguard of this support. "During the summer months of 2011, Somalia faced a huge drought and famine, the worst in 60 years," Olgan Bekar, Turkey's ambassador to Somalia, told *African Aerospace* in his heavily fortified city-centre embassy. "Facing such kind of humanitarian crisis, we started to implement a comprehensive system of programmes in Somalia.

"Our humanitarian assistance was followed immediately by development activities. Sending humanitarian assistance solves the problem for only a short time. Providing development projects; providing training for institutional capacity building – that is the most important thing."

Within the aviation sector specifically, Turkish airport management specialist Favori has initiated a 20-year

contract to operate Mogadishu's Aden Adde International Airport, including providing ground handling services and constructing the new terminal.

But Turkey's reach extends far deeper into the Horn of Africa country.

As well as providing budgetary support to the federal government – about \$30 million in 2013 – Ankara is constructing roads, schools and hospitals in Somalia. Mogadishu's 200-bed Digfer Hospital, for example, was rebuilt by Turkey at a cost of \$58 million. Following a five-year management contract, it will be handed over to the federal government as a gift.

The Turkish International Cooperation and Coordination Agency (TIKA) and the Turkish Red Crescent run countless other projects, managing orphanages, providing free meals, and teaching rural Somalis best practices for farming and fishing.

Bekar admits that such projects will take years, even decades, to deliver meaningful change to the impoverished country. But together with long-term political backing – signalled by the construction of Turkey's largest embassy anywhere in the world – Ankara shows no signs of cutting and running.

"Of course Somalis face enormous challenges," the ambassador conceded. "But they trust us, and we trust them, and based on this trust and confidence we try to help them in a sincere way."

RECLAIMING THE SKIES IS KEY TO GROWTH

Of all the milestones Somalia must pass on the road to recovery, regaining control of its airspace will surely be among the most rewarding.

Since 1993, the United Nations Development Programme (UNDP) and the International Civil Aviation Organisation (ICAO) have been responsible for managing Somali skies. In 1996, they established the Civil Aviation Caretaker Authority for Somalia (CACAS), a Nairobi-based authority that directs aircraft movements within the country.

"When all flights are calling Mogadishu, the people who respond are not physically in Mogadishu," transport minister Said Korshel explained. "They are in Nairobi, in the UN camp, saying, 'We are Mogadishu'!"

"Somalia is the only country in the world controlled by ICAO. The first country was Somalia, and the last country is still Somalia. That's not acceptable."

The federal government unveiled plans to take control of its airspace in May 2013, initially pledging to complete the hand-over by the end of the year. That timeline proved unrealistic, however, and Korshel now believes the transfer process will "take years" to complete.

Two significant hurdles must be overcome before Somalia regains control of its skies.

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First, CACAS, which has agreed to the hand-over in principle, must be fully convinced that the Somalis have the technical capabilities, human expertise and security provisions necessary to meet international standards.

In terms of technical facilities, Korshel noted that equipment manufactured by Selex, an Italian aerospace technology firm, was purchased almost two years ago and is currently being held in Rome, pending further assessments by CACAS. ICAO has also promised to train Somali controllers ahead of the eventual transfer.

But there is another significant obstacle; one that speaks to the wider political challenges facing Somalia's loose-knit federal structure.

Somaliland, the semi-autonomous north-western region vying for independence, sees airspace control from Mogadishu as incompatible with its aspirations of statehood. Though a deal was struck in July 2013 to establish a joint airspace management centre in Hargeisa, Somaliland's capital, rather than in Mogadishu, the status of that agreement is now unclear.

Mohamed Abukar, the air transport manager of Somalia's civil aviation authority (SCAMA), said there is an "on-going dialogue" between the two sides. In lieu of a political deal, he believes airspace revenue sharing with regional administrations will help to build confidence.

"Mogadishu, Hargeisa, we don't mind, as long as they accept the unity of Somalia," he stressed. "One airspace, one country, one flag."



SCAMA trio, from right Mohamed Egal, Mohamed Abukar, and Ahmed Farah.

year launched three routes to Tanzania, plus one each to Burundi, Uganda and Rwanda. It will begin serving Hargeisa in March.

Negotiations have also been held with Yemenia, Qatar Airways and Royal Jordanian Airlines.

"It's not that we are approaching other countries. They are approaching us," added Mohamed Abukar, SCAMA's air transport manager. "There was an image of Somalia as a civil-war country, pirates, everyone killing each other. Now that image is changing."

Sentiment has improved so much that, last summer, SkyGreece Airlines launched the first direct link between the European Union and Mogadishu since the civil war, partnering with Swedish tour operator Fly Olympic for weekly flights from Stockholm and London via Athens. The routes were suspended in July, however, when Fly Olympic filed for bankruptcy.

As well as leaving the door open for foreign carriers to enter the market, SCAMA and the federal government are working hard to resurrect Somali Airlines, the country's historic flag-carrier, which was founded as a joint venture with Alitalia in 1964 but ceased operations in 1991.

"We are planning to establish Somali Airlines again as the national carrier," Korshel confirmed.

"It's not going to be only a government institution; we want to give other companies – Jubba, African Express,

Daallo – a chance to join together, and each one take a share and create a big Somali Airline."

Korshel accepts that a reborn, part-privatised Somali Airlines "will not be the Somali Airlines of the 1970s and 80s". In its heyday, the flag-carrier's route network included several European cities plus an extensive footprint across Africa and the Middle East. But he insists that a more modest operation would still aid the country's economic recovery.

The cash-strapped government is therefore seeking out a foreign partner for investment in the project. Given that Alitalia offloaded its stake back in 1977, the preferred choice is, predictably, Turkish Airlines.

"We are happy and ready to work with Turkey," Korshel said. "If they can join and take a share of Somali Airlines, that's welcome and it would be helpful. Two or three or four planes could start Somali Airlines."

Should Turkish Airlines decline the invitation, he speculated that rekindling Somalia's historic relationship with Lufthansa might be an option.

Emphasising the flag-carrier's strong asset portfolio, the minister noted that it still owns offices near Aden Adde Airport, at the KM4

Continued on Page 67

"We are planning to establish Somali Airlines again as the national carrier."

SAID KORSHEL

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CONTINUED FROM PAGE 65

junction in the city centre, and even overseas in cities like Rome and Nairobi. He further believes that insurance could be recovered on some of the planes spirited away to Germany in 1991.

Even with foreign backing, though, the project will likely be dependent on commercial assistance from Somalia's existing market players. That, Korshel admitted, cannot be taken for granted.

"If it's not possible, we should respect these companies," he stressed. "It's not up to the regulator to say only certain companies should work in this country. That's history, it's gone, it's the good old days of scientific socialism. Now is the time for competition."

Egal echoed this stance, saying that SCAMA has made its preference clear, but will not interfere with the free market.

"We encouraged them (local operators) to collect together, to merge, and be Somali Airlines," he said. "We advised them to do it, but we don't force them."

Pinning down a timeframe for the re-launch is, therefore, difficult. Abukar is optimistic of progress "within the coming months", while Korshel takes a more cautious tone, saying the flag-carrier "could be back" within five years. He is, perhaps, mindful of some recent false starts.

In November 2013, a 737-400 painted in Somali Airlines' blue livery was unexpectedly photographed in Budapest. The aircraft (MSN 24438) was registered to Samair, a Slovakian charter carrier, and speculation abounded that its delivery to Mogadishu might be imminent. Within months, however, Samair had ceased operations and 24438 was earmarked for freighter conversion.

Such dashed hopes will disappoint aviation enthusiasts but, in truth, Somalia has far more urgent development priorities.

Still barely two years old, the federal government is wading through a herculean list of tasks: destroying Al Shabaab; building basic infrastructure; improving employment and education opportunities; attaining self-sustenance through the agriculture and fishery sectors; and introducing free elections by 2016.

"When you have no government for a long time, it's very difficult to recover everything at once," Korshel emphasised. "So we accept some of the problems we face."

"The important thing is that we are moving in the right direction. I think we are."



Vers la stabilité et le redressement

La Somalie vit actuellement la période la plus stable depuis l'éclatement des conflits en 1991. Le transport aérien joue un rôle catalyseur dans le redressement économique. Il soutient également les structures politiques, militaires et humanitaires mises en place alors que les Nations Unies et l'Union africaine œuvrent de concert pour réhabiliter le pays. Martin Rivers et Ian Billingham ont constaté les changements en cours à Mogadishu.

A cet égard, Saïd Korshel, ministre des Transports de la Somalie, souligne le rôle crucial que joue l'aviation dans la reconstruction de son pays de même que les perspectives de son porte-drapeau, la Somalie Airlines, de reprendre son envol.

Le processus politique prend de la vitesse dans ce pays décimé par la guerre et le terrorisme. Des élections générales sont prévues en 2016. Les membres de la diaspora somalienne rentrent au pays pour participer à sa reconstruction, à l'instar de Saïd Korshel.

A ce jour, la capitale est desservie à l'international exclusivement par Turkish Airlines. Alors qu'Istanbul sert de passerelle pour l'Europe et l'Amérique du Nord, deux hubs régionaux desservis par Jubba Airways, African Express Airways et Daallo Airlines ouvrent le reste du monde à Mogadishu : Dubaï pour des connexions avec le Moyen-Orient et l'Asie et Nairobi facilitant l'accès vers le sud, le centre et l'ouest de l'Afrique. Fly-SAX dessert également cette route.

Ethiopian Airlines opère aussi en Somalie.

Plusieurs compagnies aériennes s'y intéressent : FlyDubai, Yemenia, Qatar Airways et Royal Jordanian Airlines. Des accords bilatéraux ont été mis à jour avec l'Égypte, le Kenya, l'Éthiopie, le Rwanda, le Yémen, les Emirats arabes unis et Oman. Les pourparlers continuent avec l'Ouganda.

A noter que, SCAMA et le gouvernement fédéral collaborent pour ressusciter Somalia Airlines, qui a cessé ses activités en 1991, grâce à un partenariat. L'optimisme est de mise même si la compétition est rude dans un marché libéral.

Par ailleurs, depuis 1993, le PNUD et l'OACI sont responsables de la gestion du ciel somalien. Pour reprendre le contrôle de son espace aérien, la Somalie doit convaincre la CACAS sur ses capacités techniques, son expertise humaine et ses dispositions de sécurité pour répondre aux normes internationales.

UNE NOUVELLE IMAGE

Entretiens, le pays investit dans ses infrastructures. Le nouveau terminal de l'aéroport international Aden Adde de Mogadishu est considéré comme le noyau stratégique du développement national. Selon le président somalien, Hassan Sheikh Mohamud, ce terminal va changer la face de la Somalie.

Avec un débit maximal de 1000 passagers par heure, l'aéroport pourra gérer 60 vols commerciaux quotidiennement - plus du double que le volume actuel. Les soldats de la Mission de l'Union africaine en Somalie (AMISOM) continueront d'y assurer la sécurité, tandis que 50 gardes non armés et 70 caméras de vidéosurveillance œil suivront de près les moindres activités.

La tour de contrôle réhabilitée sera opérationnelle en 2015.

Pour Saïd Korshel, le lifting de l'aéroport est une première étape cruciale vers la normalisation de l'image de la Somalie. De nombreux pays rouvrent leurs ambassades sur place grâce à un regain de confiance.

MAINTIEN DE LA PAIX

Le transport aérien cimentera toute la structure militaire, humanitaire et politique alors que les Nations Unies et l'Union africaine travaillent ensemble pour réhabiliter la capitale somalienne.

Seulement la moitié des quelque 50 vols quotidiens à l'aéroport de Mogadishu sont des services commerciaux.

Le reste étant exploité par l'ONU et des organismes annexes pour assurer des ponts humanitaires aériens (transport de nourriture, de fournitures médicales et du personnel), des services militaires pour l'AMISOM, du soutien à la force multinationale luttant contre l'insurrection d'Al Shabaab et des vols diplomatiques ou du transport VIP.

L'UNSOA déploie entre 15 et 25 avions dont des Lockheed C-130, Bombardier « Dash 8 » et Cessna Citation Jets tandis que sa flotte giravion dispose de Mil Mi-8 et de Kawasaki BK117. Malgré les risques (évalués en permanence selon un protocole établi) dans les zones de conflit, ces avions assurent les évacuations médicales et sanitaires, le déploiement des troupes et les missions de ravitaillement.

Par ailleurs, les forces de l'AMISOM sont engagées sans relâche dans la lutte contre le terrorisme pour assurer la sécurité des populations civiles.



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Mogadishu's new airport terminal will give the Somali capital a welcome facelift when it opens this year; just one of several projects reinvigorating the country's transport infrastructure.



AIRFIELD OF DREAMS

Abdullahi Mohamud, Somalia's most senior immigration official, was working at Mogadishu's Aden Adde International Airport before the outbreak of civil war in 1991, and he still works there today.

Flicking between CCTV cameras on a huge widescreen display in his airside office, Mohamud said the airport has undergone radical changes for the better in recent years.

The introduction of biometric passports was among the most noticeable improvements. When Turkish Airlines launched flights between Mogadishu and Istanbul in March 2012, Mohamud's staff would seize fake travel documents on almost every Europe-bound flight. That flow of asylum seekers has since run dry, with the federal government's new E-passports proving too hard for human traffickers to forge.

Airport security has also improved dramatically since the days of Siad Barre, Somalia's Soviet-backed military dictator. Troops from the African Union Mission



to Somalia (AMISOM) deserve most of the credit for this, erecting rings of steel around the gateway and defending them with their lives.

But while Aden Adde Airport is in better shape today that at any point in recent history, it is far from glamorous. The gateway's crumbling terminal building and cramped immigration halls

convey the gloomiest of welcomes to international visitors.

Little wonder, then, that Mohamud and all his colleagues are waiting with bated breath for the demolition of the entire building.

Turkish airport management specialist Favori began a 20-year contract at Aden Adde

The new terminal will, in the words of Somalia's president, Hassan Sheikh Mohamud, "change the face of Somalia."

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FOCUS ON SOMALIA

CONTINUED FROM PAGE 69

Airport in 2013, and at the time of writing general manager Bora Isiner was approaching the first major milestone of the agreement: the opening of a brand new terminal building with a stunning glass façade and state-of-the-art passenger facilities.

The new terminal will, in the words of Somalia's president, Hassan Sheikh Mohamud, "change the face of Somalia".

With a maximum throughput of 1,000 passengers per hour, it will put Aden Adde Airport on-track to process 60 commercial flights per day – more than double the current volume. AMISOM soldiers will continue to secure all entrances, while 50 unarmed guards and 70 CCTV cameras will keep a close eye on activities within.

"Now that security is returning, the diaspora want to come back," Isiner noted. "And why wouldn't they? They have a beautiful country here."

Within months of the terminal opening, construction of Aden Adde Airport's new landside hotel should also be complete. Located safely within AMISOM's security cordon, the hotel will be a sanctuary for businesspeople and other international visitors who stay overnight in the capital. At present, most travellers hire a local fixer and venture into the city for accommodation.



Favori expects to see a return on its \$20 million investment within five years. Several foreign airlines have already expressed interest in serving Mogadishu, and Isiner believes the new terminal will help turn those words into actions. The opening of an upgraded air traffic control tower in 2015 should further boost confidence.

For transport minister Said Korshel, overhauling Aden Adde Airport is a crucial first step towards normalising Somalia's image.

"It all starts with the airport," he stressed. "When you arrive, if you see something beautiful, that becomes the attraction. So we thank Favori for investing. They are one of the first companies to invest in this country."

One of the first, but certainly not the last. Over at Mogadishu's sea port, Al Bayrak Group, another Turkish firm, has secured its own 20-year management contract. The company is investing \$80 million in the modernisation of the cargo hub, striking a revenue-sharing deal that will send 55% of its income directly to the federal government.

Elsewhere in the capital, more



rudimentary transport projects are slowly but surely making a difference to the lives of ordinary Somali citizens.

Mogadishu's chaotic roads had for two decades been shrouded in darkness during night-time hours, until a joint initiative by the Norwegian and British governments rolled out 15km of solar-powered street lights in 2013. Despite bringing universal benefits to residents of the capital, the lights have twice been targeted by bombers – presumably members of Al Shabaab – whose nihilistic worldview considers any developmental progress a threat to their dark vision for Somalia.



But for every push back by the jihadists, Somali society takes two strides forward. Solar-powered traffic lights are also being introduced to the capital, while the Turkish Cooperation and Coordination Agency (TIKA) is steadily rebuilding its battered roads.

On the administrative front, the federal government is working to introduce mandatory driver's licences and number plates – basic safeguards that most countries take for granted, and whose absence contributes to

While Turkish Airlines started flying to Mogadishu in 2012, Turkish airport specialist Favori began a 20-year contract at Aden Adde Airport in 2013.

the prevailing sense of criminal impunity.

Such measures are emboldening a growing number of foreign countries to rekindle diplomatic ties with Somalia. Turkey, Sudan, China, Iran, India and Ethiopia all have embassies in the city centre, undeterred by the threat of Al Shabaab attacks. Several other governments have based their embassies within the safe confines of the airport, among them Britain, Sweden, the Netherlands, Italy, America and Uganda.

"Years back it was not possible for embassies to function in Mogadishu. Nobody would accept sending their people here," Korshel recalled. "Now they feel safer."

While signs of progress are emerging in all corners of the capital, Aden Adde Airport remains the nucleus of developmental activities.

These efforts received a major fillip in 2013, when the International Civil Aviation Organisation (ICAO) removed the gateway from its Zone 5 list of airports deemed to pose a security risk to aircraft, crew and passengers. That achievement, said Ahmed Farah, flight safety manager at Somalia's civil aviation authority (SCAMA), was a watershed moment for the sector.

"They sent their investigation team here, and they recognised that we are improving," he beamed. "I don't think there is any other airport as secure as Mogadishu Airport."

"I don't think there is any other airport as secure as Mogadishu Airport."
AHMED FARAH



Though many would agree, Kenya's government still forces flights originating in Mogadishu to stop for additional security checks in Wajir, northern Kenya, before continuing on to Nairobi. Korshel believes this is a "political" decision, noting that no other countries have insisted on such measures. Aden Adde Airport, the minister emphasised, is "not just an airport, it's a Green Zone. It's totally secure".

Putting security to one side, however, he is more than willing to highlight the gateway's operational limitations. Night-time flights are not currently possible, for example, due to the absence of runway lights. TIKA is considering his request for an upgrade.

Mindful of the brain-drain caused by two decades of civil war, Turkey is also training a new generation of Somalis who will inherit the country's expanding aviation sector. In April 2014, prime minister Abdiweli Sheikh Ahmed laid the foundation stone for Mogadishu's Turkish-funded Aviation

Training Academy, due to open its doors later this year.

Asked about aviation infrastructure projects outside the capital, Korshel said lifting locally-administered airstrips to international standards must be the first priority.

"Somali civil aviation is going to be stronger than land transport," he predicted. "Each community is building a small airstrip, so we have to encourage them and help them. We have to give the facilities they need."



International partners are again fuelling much of this development, with the cash-strapped federal government unable to finance most projects itself. Thus the United Nations Support Office for AMISOM (UNSOA) recently donated eight fire-fighting trucks for use at the country's airports. Three were positioned

"Now that security is returning, the diaspora want to come back. And why wouldn't they? They have a beautiful country here."

BORA ISINER

in Mogadishu, while the rest were sent to Baidoa, Kismayo, Beledweyne and Baledogle.

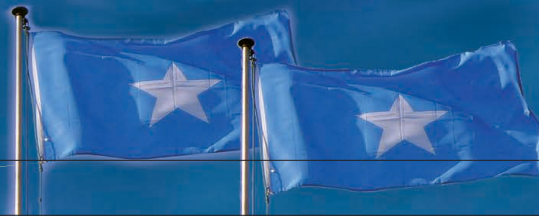
In Somaliland, the US Agency for International Development (USAID) has meanwhile constructed a wind energy facility to power Hargeisa Egal International Airport. But it is Aden Adde Airport that continues to attract the lion's share of attention – and not only from the government's supporters.

Conceding that the gateway is a major target for Al Shabaab, Mohamed Egal, SCAMA's deputy general manager, recalled how in 2010 two cars filled with suicide attackers drove up to the main entrance. One vehicle exploded, while insurgents spilled out of the other and tried to storm the terminal.

"Security destroyed them all," he smiled. "There is no way that they come in. They've tried, but they always fail. Mogadishu Airport is healthy and safe and secure from Shabaab."

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Martin Rivers finds that aviation is the glue that keeps shared military, humanitarian and political frameworks in place as the United Nations and the African Union join together to rehabilitate the Somali capital.

PEACE WORK

Only about half of the 50 or so aircraft movements per day at Mogadishu's Aden Adde International Airport are commercial transport services.

The other half are mostly operated by the United Nations (UN) and its myriad related agencies, providing a mixture of humanitarian airlifts; military support services for the African Union Mission to Somalia (AMISOM), the multinational force battling Al Shabaab; and diplomatic or other VIP transportation flights.

It is a complex web of operations that hinges on various overlapping partnerships, so the number of entities and corresponding acronyms can get overwhelming.

On the humanitarian side, the United Nations Humanitarian Air Service (UNHAS) deploys seven fixed-wing aircraft in Somalia and Kenya, supporting the activities of the World Food Programme (WFP) and more than 130 other charitable organisations. They specialise in transporting food, medical supplies and aid workers – providing a lifeline for Somalis in remote rural areas and refugee camps.

But the UN is by no means restricted to humanitarian activities in the Horn of Africa country. As part of broader international efforts to end Somalia's two-decade-long civil war, the global body also has a hand in nation-building on the military and political fronts.

Thus the United Nations Assistance Mission in Somalia (UNSOM) was established in 2013, with a mandate of helping Somalia's new federal government along the path to national elections. Even before then, in 2009, the United Nations Support Office for AMISOM (UNSOA) was set up as a field support operation to help the African Union develop its "peace enforcement" capacity, in turn strengthening the Somali



UNSOA has developed what Manzano describes as the "gold standard" of operational risk management (ORM) for each and every flight.

national armed forces.

With all these agencies and individuals depending on UN logistics, it is impossible to overstate the critical role played by the global body in rehabilitating Somalia.

Commentators who casually dismiss the UN as a "talking shop" have, evidently, never visited Mogadishu.

But with its fingers in so many pies, the intergovernmental organisation is forced to maintain and operate a daunting variety of aircraft at the Somali capital. Ernest Manzano, the UN's aviation chief in Mogadishu, is the man tasked with ensuring the fleet runs as smoothly as possible.

"The UN model can be very complex when it comes to aviation operations," he admitted. "We follow the International Civil Aviation Organisation (ICAO) standards from the higher hierarchy; then we go down to the level of the government or Somalia Civil Aviation Authority (SCAMA); and then we take it down to our mission-specific standard operating procedures.

"So there are three layers of hierarchy as far as quality assurance, technical compliance and operations that we follow."

Leaving aside UNHAS's humanitarian fleet, UNSOA deploys between 15 and 25

aircraft. Precise numbers are not disclosed for security reasons, but its fixed-wing fleet includes Lockheed C-130s, Bombardier Dash 8s and Cessna Citation jets; while its rotorcraft fleet features Mil Mi-8s and Kawasaki BK 117s. All the aircraft are leased from highly specialised regional partners such as Everett Aviation and DAC Aviation.



Medical evacuations (medevacs), troop deployments, and resupply missions make up the lion's share of aircraft movements by UNSOA.

The dangers facing such flights were underscored in August 2014, when a Mi-8 leased from Russia's UTair to the UN Mission in South Sudan (UNMISS) was shot down by surface-to-air fire. Three people died. Despite occurring well outside Somali territory in a separate conflict zone, the incident was a reminder that UN-marked aircraft are considered legitimate targets by many warlords in east Africa.

Indeed, Mogadishu has its own bitter experiences of helicopter tragedies. The infamous shooting down of two Sikorsky



Ernest Manzano:
"It's always been a high-risk mission for us, so we've developed a very robust operation."

UH-60 Black Hawks in October 1993 claimed 18 American lives. Hundreds more Somalis – civilians as well as combatants – were killed in the ensuing ground battle.

With the spectre of such attacks never far from its mind, UNSOA has developed what Manzano describes as the "gold standard" of operational risk management (ORM) for each and every flight.

"AMISOM is fully integrated with the UN," he explained. "It's always been a high-risk mission for us, so we've developed a very robust operation when it comes to ORM.

"We have a specific way of looking at risks or threats, and mitigating them. Depending on the [risk] factor, you have different things that you can do. We use our matrix, called a case model, which is used by many different militaries in the world, to guide us through the [risk assessment] process. We come up with a weighted number, and based on that number the decision is made."

Whenever a request for an aircraft is received, the UN's aviation planning office immediately initiates the ORM protocol.

It begins by profiling basic parameters:

the passenger and cargo requirements; the broad origin and destination assessments; and the expected ground-time, especially if overnight.

The matrix then fine-tunes its risk assessment with ever-more precise variables: what weather conditions are forecast; how recently the route was operated; how reliable the intelligence sources are; whether the landing strip is under military or civilian control; and what type of aircraft is best suited to the job.



Based on all these inputs, the office quickly but objectively decides whether the flight can go ahead and, if not, who would need to issue the final authorisation.

"At the working level, our staff can make the go/no-go decision," Manzano noted. "It doesn't have to go very high up in the ladder. What we like to do is keep the guys with the most knowledge making the day-to-day decisions, instead of passing it on to our senior management, who have more of a strategic view of the whole entire operation."

With any delays potentially costing

lives, the time between receiving the request and getting airborne should be around 15 minutes.

"Yesterday we got a call at 3:45 that a soldier was wounded in Merca," he recalled. "By 4 o'clock engines were on, the ORM was conducted, and it was deemed safe. Obviously it was high-risk, but it was deemed that we can mitigate the risk."

In that incident, a BK 117 was despatched with an aviation security officer and combat paramedic on board. It reached the helicopter landing site – secured by air liaison officers on the ground – within half an hour. The patient was immediately flown back to Mogadishu and is now recovering in hospital. "All the air crew are ex-military," Manzano added. "These guys have been in Afghanistan, Iraq, Colombia; they've been around, they know how to manage the risk level."

While UNSOA's time-sensitive flights are frequently a matter of life or death, deployments on behalf of UNSOM or any affiliate of the UN are more likely to involve VIP transportation.

Diplomats, dignitaries and various UN member-state stakeholders are all

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free to request transportation from UNSOM.

“There’s a lot of visitors to Mogadishu because it is now getting safer and safer, so more countries want to be part of it,” Manzano affirmed. “Our mode of transportation seems to be the most secure for the time being, so they like to jump on our aircraft and come and visit ‘Mog’ once in a while.”

These VIP services, together with all commercial flights at Mogadishu, rely on watertight airport security to ensure passenger safety.

Although the UN has an air terminal unit tasked with upgrading facilities at Aden Adde Airport, security itself is provided by AMISOM. Troops from six different nations make up the multinational force – Uganda, Burundi, Djibouti, Sierra Leone, Kenya and Ethiopia – and it is the 6,000-strong Ugandan contingent that has overall responsibility for securing Mogadishu, including its critical airport, sea port and State House.



“Anybody with anything to say about those three areas must consult with Uganda, and the Ugandan Government immediately gets involved,” explained Brigadier General Dick Olum, the commander of AMISOM’s Ugandan contingent. “The airport is our exit route, so anybody coming to play around there is playing with our lives.”

Several sub-sectors of AMISOM’s military component are instrumental in securing the land, sea and sky around the airport.

The air defence sub-component is the most obvious contributor. AMISOM does not have overall control of Somali airspace, so its military air radar system instead “zeros in” on the navigational waypoints used by commercial and military aircraft when landing or taking off at the airport. These corridors are then protected with strategically located anti-aircraft machine guns and missiles, as well as surveillance by Ugandan drones, UNSOA helicopters, and boat patrols.

Each morning, before commercial flights get under way, airborne operatives survey “the whole coastline up to 20 nautical miles southwards”. Marines also criss-cross the waters around Lido Beach – immediately adjacent to the runway – throughout the day, fanning out for a radius of 12 nautical miles.

“It’s a huge concern for us that nothing should ever, god forbid, happen to any airline,” Olum stressed. “That’s what we fight day and night to ensure. We don’t

“It’s a huge concern for us that nothing should ever, God forbid, happen to any airline.”

BRIGADIER GENERAL DICK OLUM



Al Shabaab on the run

When Somalia’s former ruling Islamic Courts Union lost control of the country in 2006 – beaten back by Ethiopian troops and forces loyal to the transitional government – the group splintered into various factions.

The largest of these, Al Shabaab, quickly gained notoriety for its military prowess and radical interpretation of Sharia law.

At the height of its power in 2010, Al Shabaab controlled most of central and southern Somalia. As well as imposing the harshest of living standards on its subjects, it amassed enviable wealth through illicit activities such as piracy, ivory hunting and charcoal harvesting.

Moreover, having mastered the art of asymmetric warfare, Al Shabaab began exporting terrorism to Kenya, Uganda and Djibouti with a wave of bombings, shootings and knife attacks. Its international agenda was cemented in February 2012, when a formal merger with Al Qaeda was announced.



But all these activities came against a backdrop of steady military successes by the African Union Mission in Somalia (AMISOM), the 22,000-strong multinational force sent to Somalia to support the transitional government.

“Four years ago, we could not even move 10km out of Mogadishu,” recalled Brigadier General Dick Olum, the commander of AMISOM’s Ugandan contingent. “Then we started pushing them out until we reached Mahaday. We pushed them up to Afgooye, and eventually up to Baidoa. We started southwards, pushing them out of all these areas bit by bit. By last year, we were already in Merca. In February, we had already pushed them past Shalambod, Qoryoley.”

Late 2014 brought two further victories: the targeted killing of Al Shabaab’s leader, Ahmed Abdi Godane, in an American drone strike; and AMISOM’s liberation of Barawe, a strategic port town 250km south of Mogadishu.

The territory under Al Shabaab control is now limited to rural districts plus a handful of small towns like Dinsoor and Jilib. But, while the jihadists are on the back foot, they are far from a spent force. Bombings still rock Mogadishu on a weekly basis and mass-casualty attacks across the Kenyan border are growing in frequency.

“Terrorism is an international problem,” Olum said, when asked about the group’s continued potency. “That is why the whole world is watching Somalia.”

sleep because of that. If one single aircraft gets a problem, then it is AMISOM that will be asked questions.”

The mission’s airport human intelligence sub-component also plays a pivotal role in securing Mogadishu’s main gateway.

As well as scrutinising passenger details for all incoming and outbound flights, AMISOM collates intelligence from multiple sources to build up an evolving threat profile at the airport. This includes not only operational intelligence and signals intelligence (often referred to as terrorist ‘chatter’), but also “hearsay intelligence” passed on from Somali partners.

“Any plan to come and attack aviation in Mogadishu, to some extent, will have reached us,” Olum confidently asserted. “AMISOM has superior intelligence in this country.”

While his troops have so far kept one step ahead of Al Shabaab, Olum believes surface-to-air fire remains a “huge threat” in Mogadishu. He is, therefore, refusing commercial airlines permission to approach Aden Adde Airport over the city, instead directing them over the Indian Ocean. This single direction of operation sometimes forces pilots to land with high tailwinds, but a re-think is not on the agenda.

“At less than 5,000 metres that aircraft can be put down by a machine gun,” the commander said pointedly. “Not even a missile, just a machine gun. Fighting the wind and fighting Al Shabaab are two different things – the most dangerous is Al Shabaab.”

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Wilson Airport, which has served commercial charter companies, flying schools and private pilots in east Africa for more than 70 years, is the second busiest airfield on the continent.

David Oliver took a walk along the flight line.

Historic airport enjoys

The history of Nairobi's Wilson Airport can be traced back to when the Aero Club of Kenya, founded in May 1928, was asked by the Kenya Government to select a suitable site for a new Nairobi West Aerodrome to replace a landing field at nearby Dagoretti.

The ground was levelled and was first used on February 19 1929 by a flight of RAF Fairey IIIFs en route from Cairo to Cape Town.

The first commercial operator to use Nairobi West was Wilson Airways Ltd, formed by Florence Kerr Wilson, who had inherited a fortune from her late husband and also came from a wealthy family of ship owners in London. The airline was formed in July 1929, shortly after she had flown from London to Nanyuki in Kenya in a Fokker Universal piloted by the famous aviator Thomas Campbell Black, who became Wilson Airways' first managing director and chief pilot.

The airline's first aircraft was a DH Gipsy Moth and initial operations were charter work, as there were only three airstrips in existence in Kenya at that time. However, Nairobi West soon became a magnet for British aristocrats, international adventurers and larger-than-life characters.

What really launched Florence Wilson's project, into which she invested £50,000, was the arrival of an Imperial Airways Armstrong Whitworth Argosy from Cairo in March 1931. Wilson Airways then started flying passengers in to connect with services to London and Cape Town and Nairobi West became Kenya's first international airport.

By the outbreak of war in 1939, Wilson Airways had 15 aircraft, including DH89A Dragon Rapides and Percival Vega Gulls, all of which were

brought into the Kenya Auxiliary Air Unit (KAAU) and the airline closed.

After the war, international flights to Nairobi used RAF Eastleigh prior to the opening of Embakasi Airport in 1958, which is now Jomo Kenyatta International.

Nairobi West, renamed Wilson Airport in 1962, became a commercial aviation backwater used for flying training, private flyers and a succession of hand-to-mouth charter companies using obsolete equipment.

It was the advent of long-range tourism at the turn of the century that revived the airfield's fortune. Recently, Wilson Airport has become one of the busiest airports in terms of aircraft movements in east and central Africa, with domestic flights constituting 80% of its traffic.



However, following a series of terrorist attacks in Mombasa and Nairobi, demand for tourist flights dropped by almost 25% and the airfield is only slowly recovering.

It is the home of the Kenya School of Flying and Flight Training Centre, which have a combined fleet of 36 training aircraft and have been unaffected by the downturn in business suffered by the small airlines.

Airkenya is one of the small airlines that use Wilson Airport for scheduled domestic passenger services. It operates services to 10 destinations in Kenya with a fleet of Cessna Grand Caravans, Twin Otters, Dash 7s and a Dash 8. The airline recently opened a refurbished passenger terminal with improved

security procedures and enlarged passenger lounges.

Formed in 2004, SafariLink provides daily scheduled flights from Wilson Airport to 22 destinations in Kenya and across the border to northern Tanzania. During the peak periods of the year its fleet of Caravans, a Twin Otter and a Dash 8 carry up to 14,000 passengers per month.

Fly-SAX, established in 2010 by Don Smith following the purchase of East African Safari Air Express, now flies to destinations from Wilson Airport in partnership with another Don Smith airline, Fly540, in and around Kenya as well as operating an extensive charter service with a fleet of Caravans, and a Fokker F28.

Boskovic Air Charter was founded by Zivota 'Bosky' Boskovic, who learned to fly in his native Yugoslavia in 1936. After his country was invaded by Germany, he escaped by air and joined the RAF as a Spitfire pilot in north Africa.

After the war, 'Bosky' emigrated to Kenya to work as a bush pilot, gaining a great knowledge of the country and its flying conditions. In 1962, he bought a Cessna 182 and started his own charter business.

In addition to being used by many of the regions' established safari companies, Boskovic Air Charter handles freight, photographic flights, aerial surveys, and provides aid, emergency and relief flying services.

Today Phoenix Aviation is one of the largest private executive air charter companies operating from Wilson Airport, with a current fleet of Cessna Citations, Beechcraft King Air B200 and B350s, Grand Caravans, a McDonnell Douglas MD 83, and a Eurocopter AS350 B3.

Safarilink Cessna Caravans are ideal for Africa, serving 22 destinations in Kenya and over the border into Tanzania.



a new lease of life

Established in 1994 by Bill Parkinson, the company originally focused on repair and maintenance of light aircraft within east Africa and air ambulance services with AMREF Flying Doctors, and small airlines including Safarilink, which still constitute a significant part of its business.

It also supports the UK-based company Diamond Executive Aviation's DA42 Twin Stars, contracted to 3SDS, which provide intelligence, surveillance, target acquisition, and reconnaissance (ISTAR) training for British troops on exercise in Kenya.

Not mentioned in its promotional literature is its expertise in airdropping ransom monies to Somali pirates. For this, it used a Cessna Caravan and a twin-engine Beechcraft King Air B200 modified for the task.

Another major operator at Wilson is Aircraft Leasing Services (ASL), which was established by a former Kenyan Air Force and Kenya Airways pilot, Mohammed Aslam Khan.

In 1992 he formed Aircraft Leasing Services as the managing director and, during the past two decades, transformed operations of the company from piston-engine aircraft to an extensive fleet of Beech 1900s, Caravans, King Airs and a Dash 8. Currently, ASL aircraft based at Wilson include a Dash 8-100 and an Embraer 135 contracted to UN world food programme (WFP) for UNHAS Somalia, and a Beech 1900D on an international committee of the Red Cross (ICRC) contract, also for operations in Somalia.

Missionary aviation operators AMREF, Mission Aviation Fellowship (MAF) and AIM AIR use the airport as their base on the African continent. Since 1980, MAF aircraft have served the

surrounding countries of the Democratic Republic of Congo (DRC), Rwanda, Somalia and South Sudan, as well as flying within Kenya itself. In 2013 it flew almost 10,000 passengers to and from Wilson Airport on its fleet of Grand Caravans, Cessna 206s and a Pilatus PC-12.

In the early 1990s Emmanuel Anassis, DAC Aviation's chairman and founder, identified an opportunity in the African humanitarian air transportation market. DAC began operations in 1993 with a single DHC-5 Buffalo aircraft and a contract with the United Nations Children's Fund (UNICEF). DAC Aviation has now been a provider of humanitarian air charter services for more than 20 years, operating in conflict areas including Sudan, DRC, Somalia, Zambia, Angola, and Ethiopia among other areas.



In August 2006, DAC acquired CMC Aviation, rebranded as DAC Aviation (EA) Ltd, a long-standing MRO facility located at Wilson Airport, to expand the company's fixed base operations (FBO).

At the same time, DAC Aviation began to operate a European Commission humanitarian aid and civil protection (ECHO) flight that provides a vital lifeline for organisations operating in some of the most remote and distressed areas of the region.

Supporting in excess of 80 scheduled flights per week with four dedicated aircraft, the ECHO flight programme continues to grow. In 2013, it flew 6,445 flight hours, including 19 medevac and security evacuation missions, carrying 30,071

humanitarian aid personnel and 594,360kg of emergency supplies.

More recently, a second CRJ 200LR was added to DAC's fleet, together with six new Cessna Grand Caravan EXs and a Dash 8 Q400, all operating in support of humanitarian aid and relief programmes.

In 2014, DAC Aviation unveiled plans to build a state-of-the-art hangar that will be the centre of excellence for training its staff, and MRO facility at Wilson Airport. The buildings will also act as a FBO for existing DAC operations.

The project has been designed as a "green" structure, tapping into solar power and using recycled materials to minimise its impact on the environment.

Located five kilometres south of Nairobi present city centre and bordering Nairobi National Park to the south, Wilson Airport is an ICAO Class 2 feeder airport under the supervision of Kenya Airports Authority (KAA).

However, despite ambitious plans by operators to modernise their facilities at the airport, its long-term future is in doubt. Its operational hours are restricted from 03.30 to 17.30, and the KAA needs to complete a new control tower, which is behind schedule, while the taxiways and parts of the two 5,000ft (1,500 metre) runways need to be repaired. Also, operators have raised concerns about residential properties encroaching closer to the airport's boundaries, posing a serious security and safety risk.

In spite of these limitations, there is no alternative airport that would be able to accommodate and operate the 500-plus aircraft that reside at Nairobi's quaint Wilson Airport.



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Terminal rising like a phoenix from the ashes

Terminal 1A used by KQ and its SkyTeam alliance partners.

«Un aéroport qui renaît comme un phénix de ses cendres» – Page 80

After the tragic fire that engulfed Jomo Kenyatta International Airport in Nairobi, a newly commissioned state-of-the-art Terminal 1A has now been constructed. Keith Mwanalushi took a closer look.

The fire that blazed through Kenya's principal airport in Nairobi back in 2013 was a nightmare for passengers and the airport authorities in the country. Flights were cancelled or disrupted and travellers had to endure using wedding reception-style tents for processing.

In just under two years, the situation looks very different – for some at least.

Since August 2014 Kenya Airways (KQ) has been migrating its flights to the ultra-modern Terminal 1A. The new terminal has capacity to handle one-way peak-hour traffic of 1,500 passengers and up to 2.5 million passengers every year. It will initially handle only departures but is expected to be fully operational by 2015 after completion of building work. T1A is used by KQ and its SkyTeam alliance partners, as well as Tanzanian regional carrier Precision Air (in which KQ has a stake).

Commissioning of the new facility is a key milestone in the Kenya Airports Authority (KAA) efforts to expand and modernise Jomo Kenyatta International Airport (JKIA). "The new terminal will massively improve the experience of customers at JKIA, besides guaranteeing operational efficiency, boosting security by separating departing and arriving passengers, and improving quality of service to airport users," said Dominic Ngigi, manager for corporate affairs at KAA.



New modern security scanning equipment is now part of the furniture.

The terminal spans three floors and includes an aircraft parking area that can handle 21 aircraft; a car park for 1,500 cars (now being used as a temporary international arrivals terminal) and outdoor surface parking for 400 cars; duty free shops; food court; customer lounges; and financial services providers, among other facilities.

"T1A has been designed to allow free-flowing movement of passengers in a spacious environment and a clear division between

arriving, departing and transiting passengers with clear signage to ensure they all get to where they need to be with minimum delay," Ngigi added.

The fire-damaged arrivals section of the airport is also due to be completely rebuilt.

Development of the new terminal involved using as much local resource as possible. Building materials that were available locally included masonry, cement, aggregate, sand and steel, according to KAA.

There was also a considerable

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amount of material sourced abroad – Ngigi said the glass was imported from Dubai and roofing Teflon from the USA. The doors and IT systems were brought in from Spain, passenger boarding bridges from China, integrated security systems from Israel, and generators from France.

“The construction of the terminal building is three-storey reinforced concrete frame and slabs with glazed curtain walling and concrete block walls,” Ngigi explained.

“The roofs are generally sloping, covered with pre-painted steel sheets or fabric waterproof membrane on steel trusses and purlins. High-quality finishing to international standards was used.

“The construction of the parking garage is in one basement with four-storey reinforced concrete frame and slabs with concrete block walls. The roof is flat with a waterproof membrane cover. External works comprise storm water drainage, foul drainage, landscaping, planting, grassing and fencing.”

KAA and the Dufry Group have signed a concession agreement for development and management of duty-free retail services under a license at JKIA. The deal, which was offered after an open international tender, will see Dufry operate a retail space in excess of 751sqm. Apart from duty-free shops, it will house cafés and restaurants, communication centres and foreign exchange services until 2024.



New IT systems allow for more efficient handling of cargo and passengers.

Perhaps the most anticipated features of the new terminal are the swanky new lounges promised by KQ. Prior to the unveiling, former KQ CEO Titus Naikuni said they would offer an exclusive, comfortable and relaxing place for guests to unwind, work, freshen up and rest before their travel or during transit.

According to a KQ statement, all of the airline’s lounges will feature an African cultural interior design complemented by contemporary Italian furniture and technology infrastructure, such as free Wi-Fi, a soundproof sleeping area for transit passengers, dining lounge, washrooms and

showers. At the business centre, KQ guests are able to use a selection of tablets and E-readers.

Set on a 991sqm area, the new ‘Pride’ lounge will feature a circular layout overlooking the airside. KQ has indicated that it will be complete with a cigar room, piped music (sectional), washrooms and showers, a children’s zone and a dining and working area.

“We are an inherently African airline, operating on a global scale. We carry guests from all across the globe through our Nairobi hub, hence the theme of our lounges as a meeting point and a melting pot of different cultures,” said Naikuni.

He added: “The Terminal 1A lounges represent our inherent African heritage as well as the contemporary world in which we operate.”



Back in passenger processing, Ngigi said KAA has invested in modern security scanning equipment, including two full-body scanning systems that use millimetre wave technology that is supposedly much safer to the human body than X-ray machines.

“We also have two explosive-trace devices and more than 15 baggage X-ray machines. There is a new baggage screening system that has five levels fitted with an explosive-detection system to enhance the safety of the baggage,” Ngigi said.

Despite the 2013 fire, the stature of JKIA has grown significantly in the last decade or so with increased passengers and cargo traffic into and out of the facility.

KAA said it has prioritised the expansion and modernisation of JKIA, which is one of the key flagship projects of Vision 2030 – a development programme for Kenya covering the period 2008 to 2030. The expansion of the airport should enable Kenya to take advantage of its ideal geographic position, and to enhance its role as a gateway to the region.

The new T1A started test flights and systems commissioning in July 2014. By late November it was operating at about 70% capacity, according to KAA.

Full completion of the terminal is scheduled for March 2015.

SOMMAIRE

Un aéroport qui renaît comme un phénix de ses cendres

Un nouveau terminal de pointe (A1) a été construit après l'incendie tragique qui a détruit l'aéroport international Jomo Kenyatta à Nairobi.

Keith Mwanalushi a fait un constat de visu.

Le feu qui a embrasé le principal aéroport du Kenya en 2013 a été un cauchemar pour les passagers et les autorités aéroportuaires. Le trafic et les passagers ont été perturbés. Moins de deux ans après, le scénario est différent - du moins pour certains.

Depuis août 2014, Kenya Airways (KQ) a basculé ses vols sur le terminal ultra moderne (T1A) qui peut gérer 1500 passagers aux heures de pointe et jusqu'à 2,5 millions annuellement. Il traitera uniquement les passagers au départ mais devrait être pleinement opérationnel en 2015 après l'achèvement des travaux de construction. T1A est utilisé par KQ et ses partenaires de l'alliance SkyTeam, ainsi que le transporteur régional tanzanien Precision Air, compagnie avec laquelle KQ a un partenariat.



Cette nouvelle infrastructure est une étape clé dans les efforts de la Kenya Airports Authority (KAA) pour étendre et moderniser l'aéroport JKIA et surtout garantir plus de sécurité et un meilleur service. Le terminal s'étend sur trois étages.

Un contrat a été signé entre KAA et le Groupe Dufry

qui exploitera une surface de vente de plus de 751m² abritant, outre les boutiques duty-free, des cafés et des restaurants, des centres de communication et des services de change jusqu'en 2024.

« Nous sommes une compagnie aérienne intrinsèquement africaine opérant à l'échelle mondiale. Nous transportons des passagers du monde entier grâce à notre hub de Nairobi, d'où le thème de nos salons comme un carrefour et un melting-pot de différentes cultures », souligne Titus Naikuni, directeur général de KQ.

Les promoteurs ont investi dans des équipements de sécurité moderne dont les deux systèmes de balayage du corps entier, deux détecteurs d'engins explosifs et plus de 15 machines à rayons X pour contrôler les bagages.

L'expansion et la modernisation de l'aéroport international est l'un des projets phares du programme de développement - Vision 2030 - qui permettra au Kenya de profiter de sa position géographique idéale et de renforcer son rôle de passerelle vers la région.

Les vols d'essais et la mise en service des systèmes ont débuté en juillet 2014. Le terminal sera entièrement opérationnel en mars 2015.

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*Following the Civil Air Navigation Services Organisation (CANSO) Africa conference in Zambia recently, **Keith Mwanalushi** caught up with director general Jeff Poole to discuss his thoughts on air traffic management throughout the continent.*

CANSO believes that Africa now has a unique opportunity to modernise air navigation infrastructure across the continent. The organisation has cited a number of factors, including the combination of technological advances and states' commitment to implementing system upgrades.

Should such upgrades be implemented, they would go a long way to improve aviation safety, enhance airline efficiency and increase connectivity to boost African GDP.

However, support and cooperation from industry partners and states is critical to making this happen.

CANSO director general Jeff Poole said his organisation's strategic plan for the air traffic management (ATM) industry – Vision 2020 – aimed to transform performance so that aircraft could fly seamlessly across invisible borders.

The work plan that supports Vision 2020 lays down 128 global and regional goals and tasks to achieve the vision.

There are 23 deliverables in the work plan for Africa that include: improving safety, including runway safety; improving operations to achieve seamless airspace; and importantly, partnership with governments and industry stakeholders.



The specific infrastructure improvements CANSO suggests include: improving en-route safety and efficiency through improved surveillance and communication infrastructure such as the implementation of automatic dependent surveillance broadcast (ADS-B); optimising approach procedures through the implementation of performance-based navigation (PBN); reducing delays and improving runway traffic flow and sequencing through airport collaborative decision making (A-CDM) and arrival and departure manager (AMAN/DMAN); as well as updating communication equipment.

“These regional communications navigation and surveillance (CNS) infrastructure enhancements are a top priority for Africa because they are an important step in improving safety and efficiency,” Poole explained.

The need to invest in new ATM technologies throughout Africa has been widely recognised for some time but the issue is how air navigation service

POOLING IDEAS...

«Une gestion plus moderne du trafic» – Page 84



CANSO Africa from left: Yafwa Mukanga - Minister of Transport, Zambia. Robinson Misitala of NACL, Thabani Mthiyane of ATNS, Jeff Poole of CANSO, and Boni Dibate of CANSO.

providers (ANSPs) can implement these technologies in a cost-effective way and keep the operational expenditure at a minimum.

“Most ANSPs are operating old communication and navigation systems (CNS), which are costly to maintain,” Poole said. “However, the International Civil Aviation Organization (ICAO) aviation system block upgrades (ASBUs), approved by states a year ago, give Africa a great opportunity.

“It means ANSPs and states can put in place the latest technologies, in line with the ASBUs, without having to convert from legacy systems. New satellite-based technologies can be adopted where there is no significant ATM coverage.”

Indeed, Poole believes Africa could even leapfrog more developed parts of the world by implementing these technologies. “We have seen some ANSPs making significant investment in CNS systems. For example, Mozambique and Namibia have implemented ADS-B, which uses satellites to more accurately track aircraft positions,” Poole said.

PBN allows aircraft to fly precisely defined paths without relying on ground-based radio navigation systems. Poole explained that by providing consistent and repeatable flight path trajectories, PBN reduces controller workload and enhances safety. He further said it reduces complexity,

decreases the need for the controller to rely on and apply tactical radar control, and it reduces dependency on radiotelephony transmissions and thus mitigates the resulting “read-back/hear-back” incidents.

However, there are some problem areas. “Even though PBN is ICAO’s highest air navigation priority, some states are falling short of their commitments, with large parts of Africa still without a PBN implementation plan and many below the regional PBN 2013-2016 targets,” said Poole.

“CANSO is helping states with PBN seminars, training and advice on implementation techniques and processes. We are also producing a best practice guide.”

ANSPs in the region need to invest in a global navigation satellite system (GNSS) because PBN uses a GNSS-based service rather than reliance on traditional ground-based navigation aids (NAVAIDS).

However, Poole said: “Because of the potential for environmental interference that impact GNSS, ANSPs may still need to rely on ground-based nav aids, instrument landing system (ILS), VOR [beacons] and distance-measuring equipment (DME) as an operational contingency procedure.”

Poole reported that CANSO has partnered with

the International Air Transport Association (IATA) to conduct a regional assessment of the current equipment of each ANSP and to coordinate with the airline community to better understand their equipment needs.

“This comprehensive assessment will assist CANSO members and their governments as well as the industry to prioritise and take appropriate next steps on the type of equipment and where the infrastructure is most needed. The results of this assessment are expected in mid-2015,” he said.

Also present at the conference in Zambia were global ATM specialists, including Thales. Thales is the largest ATM service provider in Africa and its TopSky-ATC systems cover about 70% of the region’s air traffic – more than 30 African countries.

Zambia is joining an extensive community that uses Thales systems. The ATM specialist is deploying TopSky-ATC to Kenneth Kaunda International Airport in Lusaka and Harry Mwanga Nkumbula International Airport in Livingstone.

The Thales solution is being delivered alongside two primary radars and two secondary surveillance radars equipped with select mode (Mode S). All systems are fully compliant with the new ICAO Flight Plan 2012 format and Eurocontrol standards.

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Apart from Zambia, other African countries – including Namibia, the Democratic Republic of Congo and South Africa – have deployed this air traffic automation and surveillance system.

Thales Group has also played a role in the rebuilding of key infrastructures in north Africa in the wake of heavy political reform and conflict. It has been working with the Libyan Civil Aviation Authority to rebuild and develop the country's air navigation systems and announced the certification for the Tripoli, Misrata, Benina, Sebha, Ghadames, and Tobruk airports in 2013.

The group was also at the heart of the development efforts in Egypt.

There is an industry call to choose ATC systems that could, in future, be integrated into seamless international ATM architectures. So what is the most effective way for African states to achieve this?

"There are a number of protocols for the seamless exchange of data between ATM systems and infrastructure," said Poole. "Various data share agreement templates and structures are also available to guide the process of implementation between states."



However, Poole warned that some of the systems in the region were not able to support these industry standards. "In most cases it is too expensive to retrofit these modifications on to existing systems and these shortcomings would only be addressed as part of future system procurements," he said.

"It is not only the exchange of the data that needs to be addressed, but also the accuracy, reliability, availability and predictability of the available information. The support and maintenance philosophies of the participating members need to be aligned to ensure the data integrity of the integrated ATM system.

"In certain parts of the region regulations are non-existent, or below the ICAO requirements. Lack of expertise to implement regulation remains a concern. When assisting ANSPs with the development of regulations, CANSO is fully aware that the implementation of the regulations remains one of the key phases of the project."

Another key issue to be addressed, as seen in many parts of Africa, is the extreme remoteness of some locations and to work out the best and most economical way to provide modern air navigation coverage to these regions.

Poole sees three main ways where air navigation services can be provided in remote locations: delegating service provision to a neighbouring state; using satellites to provide air navigation services through ADS-B; and the introduction of remote towers.

"CANSO has long argued that airspace needs to be organised and air navigation services need to be delivered in line with the operational requirements of airspace users rather than according to national borders. In Africa some areas of uncontrolled airspace could be controlled effectively through existing infrastructure in a neighbouring state.

SOMMAIRE

Une gestion plus moderne du trafic

Jeff Poole, directeur général de la Civil Air Navigation Services Organisation (CANSO), a partagé avec Keith Mwanalushi, ses réflexions sur la gestion du trafic aérien en Afrique. C'était à l'issue de la conférence de l'organisation en Zambie en octobre dernier.

L'Afrique a aujourd'hui une occasion unique de moderniser ses infrastructures de navigation aérienne. La CANSO a ainsi répertorié quelques prérogatives notamment l'implantation des progrès technologiques et l'engagement des états pour mettre en œuvre les mises à niveau du système.

Jeff Poole a d'ailleurs exposé le plan stratégique « Vision 2020 » pour l'industrie de la gestion du trafic aérien (ATM). Ce plan comprenant 128 mesures vise à rendre les systèmes d'ATM davantage performants pour que les avions puissent voler dans l'espace aérien à travers des frontières invisibles.

Il y a 23 actions précises concernant l'Afrique avec notamment l'amélioration de la sécurité et des opérations pour suivre un espace aérien sans discontinuité. Le partenariat entre les gouvernements et les acteurs de l'industrie d'ATM reste primordial.

La nécessité d'investir dans les nouvelles technologies d'ATM en Afrique a été actée depuis longtemps mais la question est de savoir comment les industriels africains vont implanter ces

technologies d'une manière rentable.

Selon Jeff Poole, l'Afrique pourrait même devancer les pays plus développés avec la mise en œuvre des technologies satellitaires. Le continent doit impérativement investir dans des systèmes de positionnement et de

L'Afrique pourrait même devancer les pays plus développés avec la mise en œuvre des technologies satellitaires.

datation par satellites (GNSS). La CANSO a d'ailleurs établi un partenariat avec l'IATA pour procéder à une évaluation régionale des équipements existants afin d'assurer une réelle coordination.

La Zambie, la Namibie, la RDC et l'Afrique du Sud ont déployé ce système d'automatisation et de surveillance du trafic aérien.

Selon la CANSO, le manque d'expertise dans plusieurs régions d'Afrique demeure une véritable préoccupation. Dans certains cas, les réglementations sont en dessous des exigences de l'OACI. Enfin, dans certaines régions africaines, l'espace aérien non contrôlé d'un pays peut être contrôlé efficacement par l'infrastructure existante d'un état voisin. Fournir des services à distance reste une pratique courante et efficace.

Providing remote en-route services is practised in a number of countries but it requires delegation of airspace and collaboration among ANSPs and various states, which can be a sensitive matter. The Yamoussoukro Decision in Africa should be a catalyst for promoting seamless, harmonised and more efficient airspace and we are urging states to implement the commitments they have made."

Poole strongly believes ADS-B is an important step in improving safety and efficiency. He says it provides surveillance accuracy that does not degrade with distance. "It offers air traffic controllers a much more accurate picture of the airspace and provides visibility into remote locations not covered by radar.

"While implementing ADS-B requires investment from the user community, it provides savings from shorter flight times and miles flown and a correlating reduction in fuel burn. It also provides the benefit of improved safety by limiting air-to-ground radio coordination and reducing flight-deck workload."

Elsewhere, remote air traffic control towers are coming into service in Europe. Örnsköldsvik Airport in Sweden is the first airport in the world to have remote air traffic control services. It is regarded as an economical way to provide air traffic services, with controllers sitting in a centre some distance away. "However, remote towers depend on the availability

of a reliable communications network infrastructure, which remains a problem in some parts of the Africa," said Poole. "As remote tower technology develops, this could certainly be an important solution in the future."

In terms of challenges, Poole understands well how to change the rules and regulations for operational service provision. He said recent examples have been PBN and reduced vertical separation minima (RVSM) implementation, which did not require major capital investments or perceived intrusions into sovereign airspaces, but merely required the ATM community working towards the same goals.

He added that the challenge comes when changes relating to ATC rules and regulations are dependent on major capital investments and airspace sovereignty, especially when it requires a coordinated effort between multiple states. "This is evident in the current practice of using aged equipment in some areas, and where data is not shared between neighbouring states, resulting in operational deficiencies and potential safety concerns. There are, however, positive examples in the region and individual states where these concerns are well managed and the benefits and efficiencies are realised by the ATM community."

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HERITAGE	SPECIFICATION																												
The Falcon 900 is a derivative of the Falcon 50, the world's most successful turboprop aircraft. It is the only aircraft in its class to be certified by the FAA, EASA, and the European Commission.	<table border="1"> <tr> <td>Model</td> <td>900XL</td> </tr> <tr> <td>Category</td> <td>Light Turboprop</td> </tr> <tr> <td>Manufacturer</td> <td>Bassault Aviation</td> </tr> <tr> <td>Year</td> <td>2000</td> </tr> <tr> <td>Length</td> <td>27.00 m</td> </tr> <tr> <td>Wingspan</td> <td>27.00 m</td> </tr> <tr> <td>Height</td> <td>7.00 m</td> </tr> <tr> <td>Max. Ramp Weight</td> <td>5,500 kg</td> </tr> <tr> <td>Max. Cruise Speed</td> <td>450 km/h</td> </tr> <tr> <td>Max. Range</td> <td>2,000 km</td> </tr> <tr> <td>Max. Altitude</td> <td>10,000 ft</td> </tr> <tr> <td>Max. Fuel Capacity</td> <td>1,500 litres</td> </tr> <tr> <td>Max. Passengers</td> <td>12</td> </tr> <tr> <td>Max. Cargo Capacity</td> <td>1,000 kg</td> </tr> </table>	Model	900XL	Category	Light Turboprop	Manufacturer	Bassault Aviation	Year	2000	Length	27.00 m	Wingspan	27.00 m	Height	7.00 m	Max. Ramp Weight	5,500 kg	Max. Cruise Speed	450 km/h	Max. Range	2,000 km	Max. Altitude	10,000 ft	Max. Fuel Capacity	1,500 litres	Max. Passengers	12	Max. Cargo Capacity	1,000 kg
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15 Light Sport Helicopters

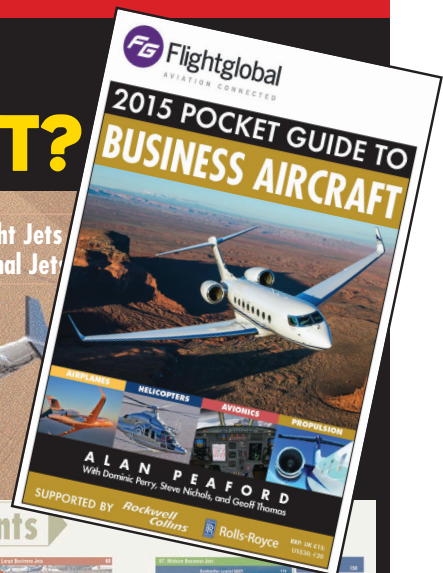


11 Very Light Jets & Personal Jets



From its place as sophisticated aircraft challenging the entry level jets – this category has everything. A number of these aircraft are the realization of dreams of designers and engineers. Some make it very difficult.

Undoubtedly they will all share the achievements of Cessna and Cirrus. Aircraft which has revolutionized the VLSJ and finally getting the VLSJ many dreamed of and comes on the local market as delivering the world's first fully conventional personal jet.



- The **2015 Pocket Guide to Business Aircraft** has just been published.
- The book, described as “essential” at the AfBAA conference in Johannesburg, is available to African operators and readers of African Aerospace.
- For \$30 you can compare technical specifications of every business jet or corporate turboprop in production.

- Colour pictures show the interior and exterior look of each model and there's a simple instruction to how to spot one plane from another.
- 420 pages
- Includes details of engines, avionics and NOW includes updates of VIP helicopters as well as piston aircraft used for business travellers.



Moves are under way to improve the accuracy of air navigation in Africa but, as Alan Dron discovered, airlines are not happy with what it might cost them.

Navigating a stormy path

Plans for a new navigational system that would eventually cover the African continent have hit problems over arguments on costs and the benefits of competing methods that would allow commercial aircraft to have a tighter lock on their position.

Satellite-based augmentation systems (SBAS) are designed to overlay the existing signals from satellite navigation systems, such as the US GPS or Russia's GLONASS, to provide a greater degree of accuracy – especially in the critical landing approach phase of a flight.

However, this improved accuracy has not met with support from the International Air Transport Association (IATA), the airline industry body, which fears that costs are too high.



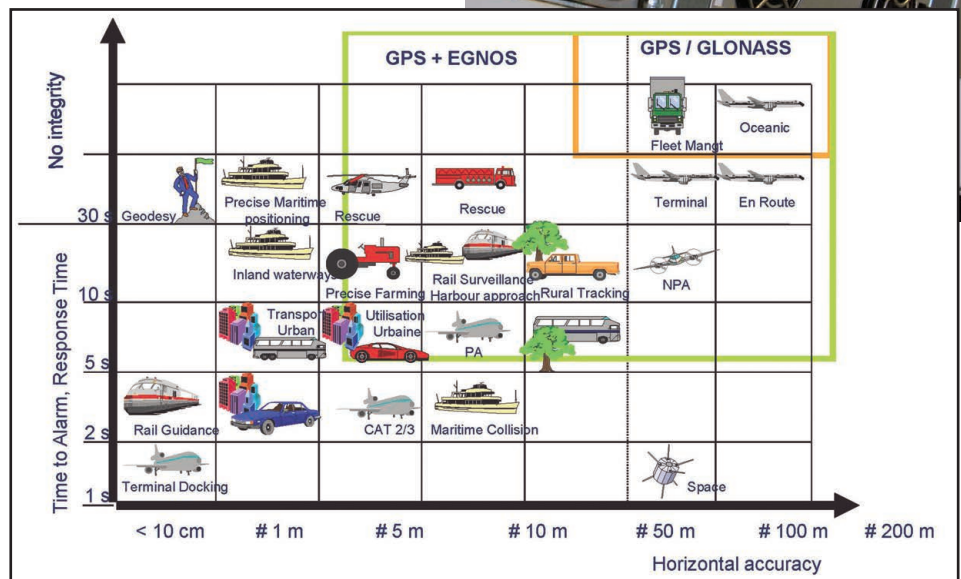
The aviation industry in Africa “has been talking about SBAS for a while now”, explained Nina Costa of Italy-based ND Consult, which carried out market research and consultancy work on the project. “It’s mostly to do with replacing non-precision approaches with approaches that have vertical guidance.”

Authorities on the continent have been under pressure from the International Civil Aviation Organization (ICAO) to improve the quality of navigation.

“A few years ago, they seemed very keen on the idea and then IATA came out very strongly against it as a solution for Africa. They said their member airlines were resisting it because they were concerned about additional landing charges and they were supporting a ground-based augmentation system (GBAS),” explained Costa.

A GBAS solution would require reference stations at each individual airport.

ICAO’s Africa-Indian Ocean planning and implementation regional group (APIRG) had asked for a cost-benefit analysis if SBAS was to be carried out, said Costa, but no money was



A refined concept

The satellite-based augmentation system (SBAS) concept is based on refining global navigation satellite system (GNSS) measurements by reference stations deployed across a continent or nation.

The errors contained within ‘basic’ GNSS signals are transferred to a computing centre, which calculates differential corrections that are then broadcast over the continent using geostationary satellites as an ‘augmentation’, or overlay, of the original GNSS message.

Several countries have already implemented their own SBSS.

Europe has the European Geostationary Navigation Overlay Service (EGNOS), which covers the EU.

The USA has its wide area augmentation system (WAAS); Japan is covered by its multi-functional satellite augmentation system (MSAS); while India, Korea and China have also launched, or announced plans for, their own SBAS.

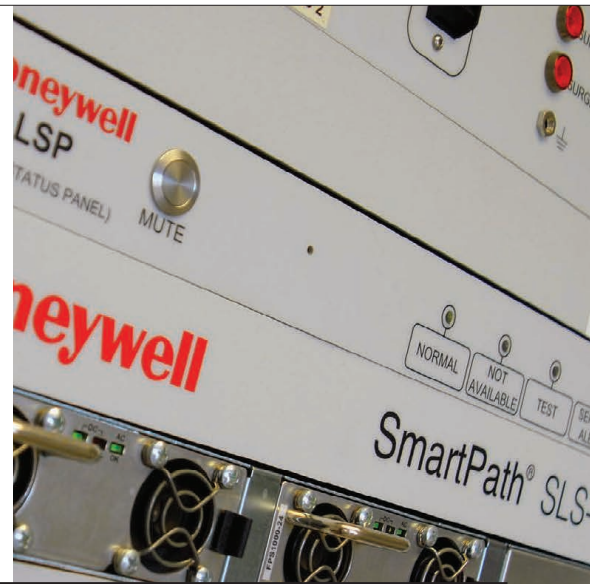
available and so “for the last two years it’s not really progressed”.

ASECNA, the air navigation service provider for west African francophone nations, had decided to press ahead with SBAS implementation and South Africa had also called for studies on the system but, again, no funding had been available for the South African system, said Costa.

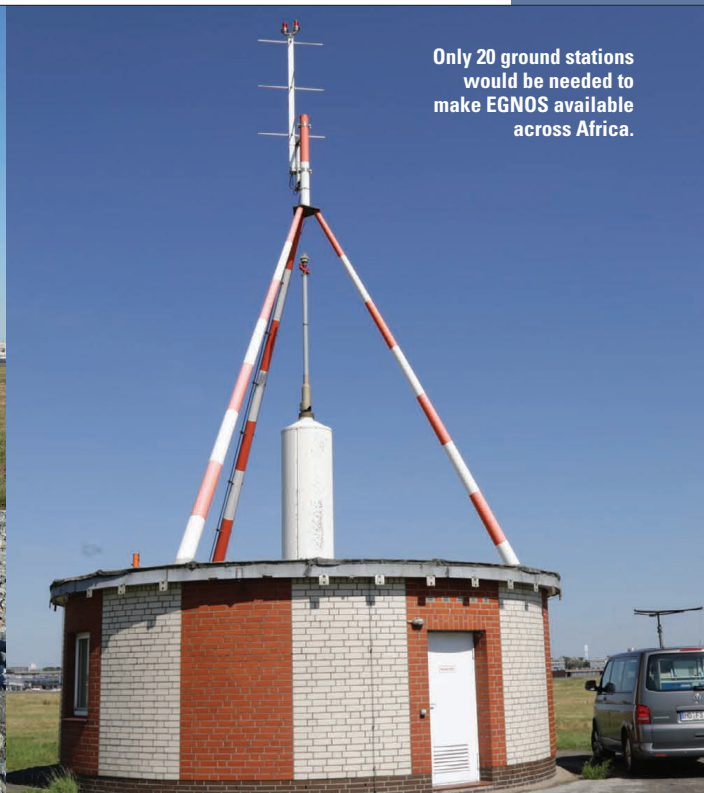
So far, a joint programme office (JPO) scheme

to push ahead with SBAS has been set up in Dakar (Senegal) and reached its complement of 10 personnel in August. It is hosted by ASECNA.

Backed by European Union funding, the European Geostationary Navigation Overlay Service (EGNOS)-Africa JPO is as a Pan-African ‘implementing instrument’, whose main role is to foster and coordinate global navigation satellite system (GNSS)/EGNOS introduction in sub-



Only 20 ground stations would be needed to make EGNOS available across Africa.



Saharan Africa for all types of applications. These include maritime, rail, road, and agricultural uses, but with a particular attention being given to aviation as the main driver.

The JPO officially started its operations in December 2013 following initial recruitment of five staff.

Its first task was to prepare a work programme, both to complete its own progress towards full operational status and beyond, as well as to put in place a 'roadmap' to implement GNSS/EGNOS in sub-Saharan Africa. This roadmap is due to be considered by stakeholders in the second quarter of 2015; the schedule for the introduction of SBAS in Africa will be decided by those stakeholders.

"There are many issues to consider before the decision is taken," said Semou Diouf, deputy director of the EGNOS Africa JPO satellite navigation services for African region (SAFIR).

SAFIR is an ACP/EU project funded through the European Development Fund (EDF 10) to set up the JPO and to undertake capacity building on satellite navigation technologies for Africa.

Those issues include developing the required competencies, institutions, operations and service provision, applications, and evolution of the SBAS technology.

There have already been considerable efforts to promote and increase awareness of the JPO and EGNOS throughout the continent.

Among issues still to be decided, is whether SBAS will initially cover a small part of Africa, then gradually expand to cover the entire continent; west Africa, South Africa and some

north African countries have on-going initiatives looking at scenarios by which SBAS could be introduced.

There are several challenges to providing the new system. Perhaps most obviously, key stakeholders have to find the necessary funding and commit it to the project. Multiple countries will have to commit to this, in order to spread the costs.

African nations have also to decide on how EGNOS should be implemented from organisational and legal standpoints. Unlike Europe, Africa does not yet have a continent-wide institutional framework for EGNOS.

End users will have to be convinced of the benefits of SBAS before they subscribe to the service. The JPO work programme has taken into consideration this requirement.



However, airlines remain unconvinced of the benefits of SBAS. IATA expressed its continuing reservations over the plan saying: "Compared to the other forms of augmentation, SBAS is extremely costly, as it comprises a network of ground-based reference stations to monitor satellite signals; master stations to process data from ground reference stations and generate SBAS signals; uplink stations to send messages to geostationary satellites, and satellite transponders to broadcast integrity and correction messages to aircraft.

"Additionally, SBAS would require costly changes to airborne equipment used by airlines today.

"While there are several SBAS systems either operational or under development being promoted, it does not offer a global solution for aviation. There is no cost-benefit analysis supporting a business case for airlines, and their aircraft are not equipped for SBAS.

"In conclusion, airlines see no operational benefit from SBAS and are not convinced of its short- or long-term potential. SBAS might fulfil operational requirements and improvements for general aviation but not for commercial airlines and, therefore, we do not support the implementation of this technology.

"We are aware that ASECNA received a grant to do an SBAS feasibility study but they are not willing to share with us what they are doing as they know the IATA position. There was an ICAO APiRG decision to conduct an independent study for SBAS but to date it hasn't been done."

Diouf believes that SBAS remains less expensive than other systems: "Expensive compared to what? Instrument landing systems (ILS)? ILS is €1 million (\$1.25 million) for one airport. With SBAS, you can cover all [of a country's airports] without ground infrastructure in each airport."

Covering all Africa with SBAS would require fewer than 20 stations, he said. "By the way, JPO's responsibility is to ensure that EGNOS is implemented in a cost-effective manner to address African safety requirements, taking into account all stakeholders' concerns."

With this stand-off, it seems that improved navigational standards for airliners in Africa may still be some distance in the future.



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Vector illustrates how to plan growth in Africa

Canadian MRO firm planning move to larger Lanseria facility, writes **Martin Ferguson**.

Burgeoning economies across the African continent have suffered a few bumps in the road of late. The Ebola crisis in West Africa created enough fear and uncertainty to curb inward investment. The miners' strikes contributed to South Africa losing its status as Africa's largest marketplace to Nigeria. But, with few exceptions, nations have continued to enjoy a steady influx of foreign capital and GDP growth. Demand for air transportation services has been relentless.

Vector Aerospace, which specialises in support for turbine engines, helicopters, fixed-wing aircraft and components, was already an established player in the global maintenance, repair and overhaul (MRO) market when it took its first steps in Africa in 2007. Like many companies across the aerospace sector, the company's leadership realised the continent presented significant opportunities. It opened modest hangars at Johannesburg airport in South Africa and Nairobi airport in Kenya, and initially employed four people.

Since then, the business has flourished. At the end of 2009 the operation in South Africa was moved to a larger space at Lanseria airport, while the Kenyan business recently switched to a 6,000 square feet hanger. And within the next 16 months

the plan is to move from the airport hanger at Lanseria to a much larger facility at a nearby industrial estate. Jeff Poirier, president of Vector Aerospace Engine Services Atlantic, says the company's growth from its current platform has remained consistent since the day operations started.

"Our focus is on providing the best product and service in the market, so our business has grown through a lot of word of mouth recommendations," he says. "We're investing across all areas of the business. For example, we have made many of our component repair processes available in Africa. Much of this used to be shipped to Canada."

At the time of writing the company had grown to employ almost 40 staff in Africa. Poirier says the success of the business has been down, in large part, to the quality of the native employees. "The dedication our African staff give to the company has been fantastic. Their skills set is great.

They are very adaptable. And above all, they really want to be part of the team and make customers are happy. Those are fundamental qualities if you want to be successful." Poirier says expats were brought in as the core management when the facilities opened, but all of them were now back in Canada.

The helicopter division – both MRO and leasing – of the African business has enjoyed particular success in recent years. Balkiz Sarihan, vice president of business development and strategy, says growth has come from supporting customers involved in humanitarian and developmental organisations, in addition to the lucrative

energy sectors. "The recent situation with Ebola has increased the demand for responsive type aid," she says. "At the same time we are seeing strong growth in the development sector, particularly in oil and gas exploration, and mining in various countries across continent. It's a positive time for our business and for Africa." Sarihan says the number of helicopters and fixed wing aircraft coming onto the continent is growing at a fast pace.

On the leasing side she reveals to African Aerospace that Vector has just deployed its first Super Puma helicopter in Africa. Three years ago the company seized a chance to buy 13 of the Airbus helicopters and

have been using them successfully across its global operation. Each helicopter went through a demodification and upgrade programme. "They were stripped round down and reconfigured to operate in more challenging environments, such as high temperatures and over jungle," says Sarihan. "The helicopters can be deployed with to assist humanitarian group operations, while the mining and oil companies have also shown great demand for lifting personnel to and from facilities in remote locations." Vector's desire to invest in this area of the business is set to continue. Sarihan says plans to bring more Super Pumas to the fleet are already in place. "It's a very versatile machine and allows us to be extremely competitive in this space."

Elections and security issues make the short-term future in Nigeria relatively uncertain. But elsewhere in Africa economic indicators are generally positive. Vector, and others, are well positioned to capitalise on the continued growth.



Balkiz Sarihan: "It's a positive time for our business and for Africa."

"The dedication our African staff give to the company has been fantastic. Their skills set is great."

JEFF POIRIER



Why converting to diesel makes so much sense

Lynne Keller, *president of Africair Diesel*, explains how converting piston-powered aircraft from avgas to diesel can allow Jet A-1 to be used. Not only is Jet A-1 widely available in Africa, unlike avgas, it is also much cheaper everywhere.

For more than a decade the Africair Group of Companies, including Tropical Aviation Distributors and Propel Aviation Sales & Services LLC, have been retrofitting Cessna Skyhawks with diesel/Jet-A powered piston engines.

The engine manufacturer was known as Centurion Aircraft Engines prior to its acquisition in 2013 by Continental Motors, and is now called Continental Diesel (CD).

Africair's personnel have performed more than 60 retrofits. These include in-country installations and upgrades to Cessna 172s in Egypt, South Africa, Germany and Guadeloupe, and retrofitted aircraft from the company's Miami installation facility to Iraq, Ethiopia, Angola, Libya, Colombia and other countries.

Propel is an EASA and FAA-certified 145 repair station and an authorised Cessna service station based at Tamiami Airport in Miami, Florida.

The beauty of the diesel conversion is that CD-powered aircraft can be operated using Jet A-1 fuel instead of avgas. Jet A-1 fuel is available virtually everywhere while, in many parts of the world, the supply of avgas is limited or non-

existent. Also, outside the US, avgas is generally much more expensive than Jet A-1 – sometimes costing as much as four times the price.

These factors, combined with the lower consumption rate of the CD engine (as low as six gallons per hour), make the CD-powered Skyhawk the perfect training or personal aircraft in many countries. The engine is reliable and fully supported by the factory warranty. Finally, because the engine has a full-authority digital engine control (FADEC) system, the aircraft is easy to operate.



The CD retrofit is extensive and involves not only replacing the entire engine and mount but also the addition of return fuel lines, relocation of the main battery, installation of back-up batteries for the systems, modifications to the instrument panel, installation of the FADEC-controlled power lever, replacement of the fuel ports and caps, significant electrical wiring rework, and other modifications.

The Africair Group is a Continental 'master installation centre' and has completed far more retrofit installations than any other facility in the



One of Africair's recent success stories was converting Cessna C172 Skyhawks for Ethiopian Airlines.

world. Its most recent success stories include the rejuvenation of the Angolan Air Force training academy and the recent delivery of additional training aircraft for the Ethiopian Airlines Aviation Academy.

In 2013, Africair delivered a fleet of six new diesel-powered Cessna Skyhawks to the Angolan Air Force, which are utilised for ab-initio pilot training, and in July 2014, Africair delivered three new diesel-powered Skyhawks to Ethiopian Airlines in Addis Ababa. These aircraft will be heavily utilised by these training organisations for years to come.

Abyssinian Flight Services in Addis Ababa, Ethiopia was also due to take delivery of its seventh and eighth retrofitted Skyhawk as it continues to grow its flight school fleet.

The Africair Group specialises in customised support for its diesel aircraft and can arrange all international sales logistics, disassembly and containerisation, shipping, reassembly, in-country technical and flight support, and unparalleled after-sales support.

Cessna Skyhawks converted from avgas to diesel are logging thousands of hours all over the world. The fleet of four-cylinder power plants

has accrued more than 4 million hours and is flying in 2,400 aircraft worldwide.

Regardless of the application, Africair, TAD, and Propel are uniquely qualified to retrofit, upgrade, or support diesel/Jet-A-equipped aircraft.

With the backing of AVIC Corporation and the support of Continental Motors, Continental Diesel has brought new stability to an outstanding line of diesel engines. As the market leader for diesel and avgas aircraft engines, Continental Motors Group chose to bring all of its diesel engines under a single brand in July 2014.



The diesel engines previously referred to as 'Centurion' have been renamed 'Continental Diesel', abbreviated to CD. The former Centurion Diesel 2.0S is now the CD-155 and the former Centurion Diesel 2.0 engine is now the CD-135. Continental's newest diesel V6 will start the CD-300 series of engines, with the first product rated at 310HP.

Africair can convert Skyhawks of any vintage, provided the supplemental type certificates

(STCs) cover the airframe. In addition, it can retrofit Pipers as well.

For converting pre-owned Skyhawks, the finished cost depends on the year and condition of the aircraft that is retrofitted. For example, Africair has available now in inventory a 2000 'S' model with less than 1,000 hours total time on the airframe and a fresh conversion priced at \$295,000.

Buyers can customise and spec out the aircraft to meet their specific needs and their budget, so the prices can vary. Africair has modified aircraft going back as far as the 172K model.

The Africair Group employs eight technicians who have completed the CD factory-training course and six pilots with significant time in the CD-equipped aircraft. It has supplied technicians and pilots for in-country training for months at a time to support programme implementation around the globe.

Its employees speak French, Creole, Portuguese, Spanish, German, Arabic, Hindi, Farsi, and Swahili and there are liaison offices in San Juan, Puerto Rico and Nairobi, Kenya, as well as a team of field service engineers based in Abuja, Nigeria.

The recent Airline Passenger Experience (APEX) Expo in Anaheim, California, showcased the latest in in-flight entertainment and connectivity (IFEC) from the likes of Thales, Panasonic, Lufthansa Systems and others.

Steve Nichols was there.



Bluebox's Kevin Clark and a tablet IFEC device.

The BYOD shop: it's a natural for airlines

So-called bring your own device (BYOD) solutions, where passengers view content on their tablets and other personal electronic devices (PEDS), formed the focus at APEX.

The advantages are a big weight reduction on the aircraft, cost benefits, plus the onus moves to the passenger to make sure they have the latest technology.

As one expert put it: "By the time a seat-back monitor is installed on an aircraft it is already out of date. The chances are that the passenger may own a more up-to-date playback device. So it makes a lot of sense for airlines to look at BYOD."

Lufthansa Systems was demonstrating its BoardConnect system. This is based around a WiFi network that passengers can log on to through seat-back screens or their own laptops, tablet PCs, smartphones or PEDs.

This enables them to access a wide range of content, including audio and video on demand (AVOD).

Lufthansa Systems has also added an e-reader capability to BoardConnect. Passengers can read newspapers, books and other material on their Wi-Fi-connected personal device.

The company added a twist at APEX. It showed that airlines could replace their built-in IFE systems with commercial off the shelf (COTS) tablets, mounted in the seat back that

then work with BoardConnect. The tablet fits into a simple dedicated support frame that fits into the seat back with just two screws.

Lufthansa Systems' Norbert Muller said the benefit was obvious. "There are huge cost savings to be made by using COTS tablets for your IFE system – they are shipped in millions," he said.

"By using a commercial tablet you get the best of both worlds – the latest technology and the ability to replace it cost-effectively whenever you want."

The system is currently at prototype stage and Lufthansa Systems is talking to seat manufacturers and airlines to gauge interest.

Others showing portable or WiFi-streaming solutions included Bluebox, DigEcor, Global Eagle Entertainment, BAE Systems and Thales.

In 2012 Global Eagle's Row 44 completed the installation of in-flight WiFi on Mango Airlines' fleet in South Africa. It became the first commercial airline in Africa to fly with a passenger in-flight WiFi service.

Panasonic Avionics had good news for airlines using single-aisle aircraft in the region. It unveiled a new low-weight phased-array Ku-band satellite antenna that promises high performance and good reliability.

The antenna is just 2.7 inches/68mm tall with a very low drag coefficient, which means it can help airlines save fuel without compromising

antenna performance. It will be available to the commercial aircraft market in 2016.

Panasonic also displayed its eXConnect and Global Communication Suite product lines. Last year, Etihad Airways enabled passengers on board its long-haul aircraft to watch all 64 FIFA World Cup football matches.

Every game was transmitted live by IMG Media using Etihad Airways' interactive IFE system – E-box – powered by Panasonic technology.

The technology giant also announced it is introducing near-field communication (NFC) technology to its IFEC systems in the summer of 2015. This will enable payments to be made and information to be exchanged just by the passenger's device being near to the IFEC system.

Passengers and crew will be able to use NFC-enabled smart phones and cards in flight to enable transactions and purchases, or to recognise a passenger's frequent flyer status. NFC will also enable the crew to check in and out for duty automatically, or push information to passengers' devices during their flight.

The new Apple iPhone 6 has NFC built in and it is estimated that, by 2016, some 55% of smartphones will be NFC-enabled.

Geneva-based OnAir was promoting its in-flight telephony and internet services. The company announced earlier this year that TAAG Angola Airlines had become OnAir's first sub-



Panasonic's interactive displays.

Saharan African customer – line-fitting its new B777-300ER fleet with Internet OnAir and Mobile OnAir.

OnAir is also flying with EgyptAir and Libyan Airlines. The company announced that it is now working on an aircraft e-enablement programme called OnAir Plug. This will use a satellite connection to deliver services for both the cockpit and cabin crew.

Thales said it is now better positioned than ever to attack the IFEC market with its recent acquisition of Florida-based LiveTV. This gives it access to expertise in the ultra-fast Ka-band market.

It is also announced that it is now a value-added reseller (VAR) for Inmarsat's upcoming GX Aviation global Ka-band service.



Inmarsat said that it is confident that it will meet its target date of mid 2015 for the global launch of GX Aviation.

Leo Mondale, Inmarsat's president aviation, said that the company's first I-5 GX satellite is in orbit and working well, and the next two will be launched in due course.

Cape Town-based Cobham Satcom was also at the show to demonstrate its new Aviator 200S satellite terminal and antenna. This is a compact two-line replacement unit (LRU) satellite communication system that combines cabin connectivity and cockpit services all over a single Inmarsat SwiftBroadband (SBB) channel, meeting the requirement for future air navigation system (FANS) 1/A operation.

Cobham is working closely with Inmarsat to bring the next generation of airborne satellite communication to the market, following final safety services approval of SBB in about 12-18 months.

Cobham said the Aviator SBB systems are easy to install and provide connectivity for applications including e-mail, internet browsing, voice calls, data transmission, smartphone connectivity and streaming video.

It also combines the provision of SBB aircraft communications, addressing and reporting systems (ACARS) data services for air traffic control and aircraft operation with an internet protocol (IP) data pipe.

Rockwell Collins, which acquired Arinc earlier this year, says it intends to build 25-40 more VHF aviation base stations in Africa to extend its aero data network. The company adds that it aims to do this "sooner" rather than later.

The African region did well in the 2014 'passenger choice' awards, presented during the Expo.

Ethiopian Airlines won 'best airline' in the Africa region for the second year running. The other finalists were Kenya Airways and South African Airways.

Ethiopian was also a finalist in the 'best overall passenger experience', 'best food and beverage', and 'best in-flight video' categories.

Tewelde Gebremariam, CEO of Ethiopian Airlines Group said: "Ethiopian is above all a customer-focused airline with global standard service with superior delivery through its hallmark Ethiopian-flavoured African hospitality.

"Passenger choice is the most important award in our industry, since it is our customers who rate us by benchmarking our service with others in the industry.

"This award is a strong vote of confidence by our customers and an encouragement to continuously enhance our on-ground and on-board services with a view to meeting their high expectations."

The 2015 APEX Expo is moving to Portland, Oregon from September 28 – October 1.

SOMMAIRE

Le BYOD en vogue au salon APEX

Le récent salon *Airline Passenger Experience (APEX)* tenu à Anaheim, en Californie, a présenté les nouveautés dans le domaine du divertissement en vol et de la connectivité (IFEC) avec en première ligne celles de Thales, Panasonic, Lufthansa Systems entre autres. **Steve Nichols** était présent.

Le concept dit « *Bring Your Own Device* » (BYOD) selon lequel les passagers accèdent au contenu via leurs tablettes et d'autres appareils personnels électroniques (PEDS) était le point d'orgue du salon. Parmi les avantages, une réduction considérable de la masse de l'avion et la possibilité pour le passager d'avoir la dernière technologie.

Lufthansa Systems a fait une démonstration de son système BoardConnect basé sur un réseau WiFi auquel les passagers peuvent se connecter à travers l'écran adossé au siège ou leurs ordinateurs portables, tablettes PC, smartphones ou PED.

D'autres compagnies ont présenté des solutions pour portables ou WiFi streaming dont Bluebox, DigEcor, Global Eagle Entertainment (GEE), BAE Systems et Thales.

En 2012, GEE a installé WiFi sur la flotte de Mango Airlines en Afrique du Sud. C'était une première en Afrique.

Panasonic Avionics a dévoilé une nouvelle antenne satellite pour les compagnies aériennes utilisant des avions monocouloirs dans la région. Elle a aussi présenté ses lignes de produits eXConnect et Global Communication Suite. L'année dernière les passagers des vols long-courriers d'Etihad Airways ont pu regarder les 64 matchs de la Coupe du Monde de football.

OnAir, basée à Genève, a également fait la promotion de ses services de téléphonie et d'internet. TAAG Angola Airlines a été son premier client en Afrique subsaharienne.

La compagnie Thales affiche sa confiance pour conquérir le marché IFEC suite à sa récente acquisition de LiveTV basée en Floride. Idem pour Inmarsat quant au lancement mondial de GX Aviation mi-2015. Cobham Satcom, basée à Cape Town, travaille en étroite collaboration avec Inmarsat pour le lancement de la prochaine génération de communication par satellite en vol suite à l'approbation finale des services de sécurité SBB dans environ 12 à 18 mois.

Après l'acquisition d'Arinc cette année, Rockwell Collins divulgue son projet de construction de 25 à 40 stations VHF supplémentaires en Afrique pour étendre son réseau de données aériennes.

Ethiopian Airlines a remporté le prix de la « meilleure compagnie aérienne » dans la région pour la deuxième année consécutive. Les autres finalistes étaient Kenya Airways et South African Airways. Ethiopian Airlines était également finaliste dans trois autres catégories.

DHL, the global market leader in the logistics and transportation industry, has invested €30.5 million (\$37.5 million) to support the group's long-term growth plans in Africa. **Vincent Chappard** reports.

DHL gets things moving in Africa



Two new facilities located in Plumbago, near the OR Tambo International Airport east of Johannesburg, were launched in October, leading DHL's renewed charge on the African continent.

Investment is key in developing South Africa as a logistics hub for the region and Plumbago offers the twin benefit of both major road access and high visibility.

According to DHL, the €16 million (\$19.66) new Plumbago Business Park (12,000sqm of warehouse space and 5,500sqm of office space) will improve cargo handling with an enhanced flow of goods in and out of the facility.

It also offers customers a full range of value-added-services, such as bonded storage and re-packing, enabling DHL Global Forwarding and Freight to expand its airfreight and ocean freight export handling capabilities.

Craig Roberts, CEO supply chain Middle East and Africa, said: "Technological investment is a key focus to expand new activities in Africa and in emerging countries."

Even though South Africa will continue to be an important logistics hub, DHL wants to tap into new markets in eastern and western Africa and emerging markets.

"Part of our global three-pillar 'strategy 2020'

is to focus on further expansion of logistics services in the world's emerging markets. Today, emerging market revenues contribute just over 20% of the group's revenues; by 2020, we expect this figure to climb to 30%," said Roger Crook, CEO, DHL Global Forwarding and Freight.

DHL Global Forwarding Sub Saharan Africa currently has approximately 400 employees in South Africa and more than 1,000 across the African continent.

DHL's African air freight network covers 48 countries on the continent, with five major hubs in South Africa, Nigeria, Ghana, Senegal, and Kenya.

Talking up the supply chain

Craig Roberts, CEO, DHL supply chain - Middle East and Africa talks to Vincent Chappard.

Q: You have stated that DHL has an ambitious growth strategy for this region and intends to use its South African assets as a springboard into the rest of Africa. How will this work?

A: The African contract logistics market is forecast to grow to €3.2 billion (\$3.9 billion) by 2016 and, as such, DHL Supply Chain will focus on implementing the long-term goal of increased automated throughput and other planned investments at warehouses located in the north, east and sub-Saharan African regions until the year 2020. With many multinational companies having their regional offices and distribution centres in South Africa, we offer tailored value-added and multimodal services to these companies that want to import and export their shipments from South Africa to these other African countries.



Q: What are the main components of DHL's 'strategy 2020', which focuses on expanding logistics services in the world's emerging markets?

A: We intend to focus on what has made us successful globally as we endeavour to expand activities across Africa and other emerging markets. We will continue to embrace a connected approach in operations, commercial, green solutions and shared services to achieve quality leadership and service excellence. We are expanding our services to become a leader in e-commerce-related logistics, which is being translated through another business unit.

Q: What are the main DHL projects to strengthen its activities and investments in Africa?

A: We're focusing on employing efficiencies throughout our current air freight and ocean freight offerings, as well as our industrial projects, as these will provide us with the benchmark for best practice in the region, which we will then take into the rest of the continent. Also, the continuous development of our road freight solution into Africa, expanding into key distribution hubs, and our technological investment for the product are other key focus areas.

Q: In which countries or regions does DHL plan to expand its supply chain, network and business?

A: South Africa will continue to be the major logistics hub in Africa. However, we can see a growing demand in key western and eastern African countries such as Ghana, Nigeria, Angola, Kenya and Tanzania.



Plumbago (inset) offers DHL the twin benefits of major road access and high visibility.

In South Africa, it has offices in Johannesburg, Cape Town, Durban and Port Elizabeth, with air freight and ocean freight hubs in Johannesburg and Durban.

The Johannesburg warehouse facility is Transported Asset Protection Association (TAPA)-A certified and there are 10 main regional partner airlines in the country.

The company also has a road network presence in 13 African countries – South Africa, Namibia, Angola, Botswana, Zimbabwe, Zambia, Mozambique, Lesotho, Swaziland, Malawi, Democratic Republic of Congo, Tanzania and Uganda.



“We are the number one air freight service provider globally, thus we can leverage on our global buying power to provide the much-needed services to our customers worldwide,” added Roberts.

Air freight (forwarding) is one of the core services of both DHL Global Forwarding and its sister company, DHL Express. Together, their air freight presence covers 48 countries in sub-Saharan Africa.

Major hubs serve as transit stations to other countries and are located in Johannesburg, South Africa; Lagos, Nigeria; Accra, Ghana; Dakar, Senegal and Nairobi, Kenya.

“This is to ensure that no country in Africa is rendered inaccessible. We also work closely with DHL Aviation and major commercial airlines in the region to meet the freight demands of the continent,” said Roberts.

He also believes that there are further growth

opportunities in air freight between Africa and Asia and Middle East or Europe.

DHL Group wants to play a positive role as a reliable partner in Africa’s future growth.

According to Roberts: “One of the most remarkable things about Africa is its ability to regenerate and re-invent itself.

The international spotlight is on Africa and its unprecedented development pace, in terms of its large market size, high growth rate and increasing ease of doing business.

“We see big growth opportunities in intra-Africa trade, which is greatly enhanced by our hub system.

“We also see good growth potential in the life sciences sector, bolstered by the launch of our industry-changing temperature-controlled life sciences air freight service – DHL Thermonet – in February 2014, which is the first of its kind in Africa, and in the chemical sector.”



The widespread presence of DHL in the continent, able to complement its air freight offering with multimodal services, extensive customs clearing capabilities and warehousing facilities, certainly gives it the added advantage of being able to provide end-to-end logistics solutions to customers.

“Our vision is to stay ahead of the pack by driving innovation in business and leveraging our global capabilities. Hence we continue to encourage forward thinking and the implementation of programmes that lead to faster, easier and better services to our customers,” concluded Roberts.

SOMMAIRE

DHL renforce sa logistique en Afrique

DHL, le leader mondial dans l'industrie de la logistique et du transport, a investi 30,5 millions d'euros pour soutenir les plans de croissance à long terme du groupe en Afrique. Deux nouvelles installations situées à Plumbago, près de l'aéroport international OR Tambo, à l'est de Johannesburg, ont été lancées en octobre dernier. Vincent Chappard détaille la stratégie du groupe.

L'investissement est vital pour faire de l'Afrique du Sud une plaque tournante pour les services de logistique pour la région et Plumbago s'avère un emplacement stratégique offrant une meilleure visibilité. Selon DHL Global Forwarding et DHL Supply Chain, ces infrastructures vont soutenir la croissance à long terme prévue dans la région.

Avec un coût de 16 millions d'euros, le « Business Park » de 12000 mètres carrés d'entrepôts et 5500 mètres carrés de bureaux, permettra, selon le groupe, d'améliorer la manutention du fret en facilitant le flux de marchandises entrant-sortant. Il offre également aux clients une gamme complète de services à valeur ajoutée (SVA), comme l'entreposage sous douane et le ré-emballage.

Même si l'Afrique du Sud continuera d'être une plate-forme logistique importante, le groupe souhaite étendre ses services aux marchés émergents.

« Aujourd'hui, le chiffre d'affaires enregistré dans les pays émergents s'élève à un peu plus de 20 % du chiffre d'affaires du Groupe. Nous prévoyons un accroissement de ce pourcentage à 30 % d'ici 2020 », explique Roger Crook, PDG, DHL Global Forwarding and Freight.



La division DHL Global Forwarding Afrique subsaharienne compte actuellement environ 400 employés en Afrique du Sud et plus de 1000 employés à travers le continent africain.

Par ailleurs, le réseau du fret aérien (l'un des services de base de DHL Global Forwarding et une compétence de base de sa société sœur DHL Express) couvre 48 pays d'Afrique avec cinq plaques tournantes majeures : l'Afrique du Sud, le Nigéria, le Ghana, le Sénégal et le Kenya.

La société a également une présence sur le réseau routier dans 12 pays africains.

Le groupe veut jouer un rôle positif en tant que partenaire fiable de l'Afrique pour soutenir sa croissance future. Il existe d'énormes opportunités et les mesures de la Stratégie 2020 intègrent efficacement ce plan de développement.

Graig Roberts, PDG de Supply Chain au Moyen-Orient et en Afrique, est catégorique sur la stratégie de DHL. « Notre vision est de rester en tête du peloton en favorisant l'innovation dans les entreprises et profitant de nos capacités mondiales. » Bref, parvenir à un leadership de qualité et une excellence du service.

Africa & The Middle East

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One of the major challenges that African airlines are facing at the moment is access to aircraft financing. **Kaleyesus Bekele** asks whether the situation is improving?



SURVIVAL OF THE RICHEST?



Most African carriers have ageing aircraft that call for urgent fleet renewal programmes but, unfortunately, they do not have the required financial resources to purchase new aircraft.

With an average age of 18 years, Africa has the oldest fleet in the world. Small private airlines in Africa, in particular, operate ageing aircraft prone to accidents.

Boeing has a concern over Africa's ageing fleet. The US manufacturer says that almost 45% of the African airline fleet is already more than 15 years old and that, by 2030, a total of 1,210 aircraft will be required to meet the market growth in Africa. The company points out that, of the 680 Boeing aircraft currently operating in Africa, 270 (34%) will need to be replaced and an additional 530 (66%) will be needed to meet projected growth.

According to Allison Bone, communications director at Boeing Capital Corporation, in the past 10 years African customers have placed orders for 184 Boeing aircraft (January 2004 to October 2014).

The company, which has more than 40 customers across Africa, believes the continent is going to require about 1,100 new aircraft over the next 20 years, approximately two-thirds of which will expand the region's fleet. Bone said African carriers continue to have good access to financing, including export credit to support their deliveries.

Europe's leading manufacturer, Airbus, forecasts that airlines in Africa

Continued
on Page 98

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and the Indian Ocean region will require 1,101 new passenger aircraft valued at \$126 billion by 2030. The factors underpinning Airbus's outlook for Africa are fast economic growth, fast population growth, rapid urbanisation and middle-class development, attractiveness for inbound tourism, strong potential of outbound and intra-Africa tourism and travel, and potential from liberalisation and the development of the low-cost carrier segment.

According to Joep Ellers, Airbus marketing director for Africa, a total of 253 Airbus aircraft have been sold to African operators since 1974. These comprise 125 A320 family aircraft, 35 A330s, 22 A340s and 28 A350 XWBs, along with 2 A380s. The balance would have been older generation Airbus aircraft (A300/310).

There are currently 199 Airbus aircraft operated in Africa. This fleet is made up of 127 A320 family aircraft, 12 A300/A310s, 33 A330s and 27 A340s.

Airbus boasts 35 customers/operators in Africa, including four cargo operators. In addition, there are three carriers that have ordered Airbus aircraft and will become operators when they receive their aircraft – Ethiopian Airlines, Air Austral and Libyan Wings.



Matthew Saks, customer finance manager - Africa, Airbus, says global aviation finance is benefiting from a surge in liquidity. As a result, airlines are able to access more options of financing, from traditional commercial debt to capital markets and leasing options. However, Saks added that this array of options was not always available for every airline and, indeed, African airlines, which are sometimes viewed as weaker credits, have traditionally had more limited options.

According to Saks, solutions are available for African airlines, notably:

- Export credit agency (ECA) financing – depending on the ECA policy with regards to a specific country. This still represents one of the best sources of finance for African airlines. In such instances, it may be that government guarantees are required for state-run airlines. Such airlines are encouraged to ensure that they have the full backing of their governments when seeking ECA financing.

- Developmental banks are now recognising the importance of aviation as a major contributor to growth in Africa. As such, they are starting to dedicate resources, in terms of both personnel and finance, to helping airlines. “We have seen deals for the likes of Ethiopian, Kenyan, RwandAir and Air Cote d’Ivoire being financed by various development banks,” said Saks, who added that airlines should ensure that they build

Zemedeneh Negatu: “In the past few years many African airlines went bankrupt. In my opinion, only a few airlines – such as South African Airways, Ethiopian Airlines and Kenya Airways – will survive.”



strong relationships with the development banks so that when the time comes they are well placed to seek financing.

- Commercial banks are another option. Several major African banks have specialist teams dedicated to aviation finance with a focus on Africa. “Airlines should ensure that they are familiar with these teams in order to initiate relevant discussions when required,” said Saks.

- The lessor community still remains one of the best means by which to finance aircraft. Through either direct lease or sale and leaseback transactions, lessors are often best placed to take the additional risk an African airline may represent when traditional providers may be cautious.



Saks said that, in all instances, it should be noted that financing is never easy and is dependent on the financier's risk assessment of the airline. “Airlines that are well managed, with clear, pragmatic business plans and a solid track record, will be best placed to access the given financing available,” he concluded.

With an annual compound growth rate of 6%, the African airline industry is the second fastest growing region next to the Middle East. Africa contributes 3% of global air traffic, while its aviation industry creates 6.7 million jobs and contributes \$68 billion to GDP.

Christian Folly-Kossi, aviation consultant and

former secretary general of the African Airlines Association (AFRAA), said the airline industry is capital intensive and the African carriers are starved of resources. “Today a new aircraft on the average costs between 65 to 100 million dollars. Very few airlines in Africa have equity of 100 million dollars.

“It means that if you take all your working capital to buy your equipment, you can afford only one. And there is no airline that can work on one foot. If you want to start your business with four or five aircraft, you see the financial challenge.”

Folly-Kossi went on to say that most of the African airlines were not well founded and governments were not able to chip in the stated amount.

“This is a weakness from the beginning,” he said. “Adding to that the financial risk is rated very high. The financiers are reluctant to lend money to African carriers because they are not sure of the stability of our countries. And they are not sure of the profitability at the level we operate because the industry gives a narrow profit margin.

“Also, we need to operate at a high scale to make a significant profit. That bottom line, profit, is important for the bankers to lend money.”

He added that lessors and financiers have a negative risk perception about Africa.

Zemedeneh Negatu, managing partner of Ernst & Young Ethiopia, said there are only a few major airlines in sub-Saharan Africa which had the financial capability to buy brand new jets that

Tewolde Gebremariam:
 “Having a clean balance sheet and good credit history are the most important things in accessing financing.”



could cost more than \$100 million. “When I say major airlines, I am talking about those who have annual revenues of [at least] a billion dollars. In the past few years many African airlines went bankrupt. In my opinion, only a few airlines – such as South African Airways, Ethiopian Airlines and Kenya Airways – will survive in the coming years.



“Most of the airlines are composed of small fleets and operate with minimal working capital. They can hardly afford to buy new jets because it is very expensive for them.

“Financiers are reluctant to give loans for weak airlines. Lessors would be reluctant to lease a \$100 million aircraft to a small airline. Even if they could afford to lease an aircraft, the rate would be higher [than elsewhere in the world] and that would increase the operating cost.”

Negatu, who consults for a number of African airlines on financial issues and business strategies, said that the Cape Town Convention was a useful financial tool, and could help African airlines to cut down their aircraft investment costs based on reduced costs to creditors.

“This will particularly benefit African countries whose carriers have had to pay high interest rates, or who have not been able to access the commercial credit markets at all because of their credit risk,” he said.

The keys to raising finance

The Cape Town Convention and aircraft protocol was negotiated under the auspices of the International Institute for the Unification of Private Law (Unidroit), an inter-governmental organisation focused on harmonising the commercial law of nations and the International Civil Aviation Organization (ICAO). It was concluded in November 2001 at a diplomatic conference in Cape Town, South Africa.

The convention provides financiers with a number of key rights with respect to an aircraft financed for an airline of a country that has ratified the convention and protocol. As a result, the lender can offer lower financing.

The US Ex-Im bank offers eligible foreign buyers an exposure fee of as low as 2%, a one-third reduction on the minimum 3% exposure fee on large aircraft financing.

Ethiopian Airlines CEO, Tewolde Gebremariam, says having a clean balance sheet and good credit history are the most important things in accessing financing. “Ethiopian has been profitable for the past many years. Even during turbulent times we were profitable and we have a credible credit history. So accessing financing is not a big problem to us,” he said.

However, he noted that access to capital in Africa is a critical challenge. “The listing of African countries by rating agencies has a paramount importance in accessing aircraft financing. Most of the countries do not have the right rating for their airlines to access the capital market.”

He stressed the need to have good liquidity and credit rating in order to get financing.

However, Dr Elijah Chingosho, secretary general of the African Airlines Association (AFRAA), believed

aircraft financing was not a problem. “I do not think financing is a problem. The major problem is having a viable business plan,” Chingosho said.

He added: “Once the vision is very clear – where you want go, what you want to achieve and how you want to achieve it – you need to have the right equipment. You need to have an efficient and reliable management. You also need to have a good financial statement. Then you will get the financing.”



He continued: “The banks need bankable projects. If an airline has poor leadership, poor management and if its financial statement reflects negative results, then nobody will give a loan. The banks want to make sure that they will get their money back.”

According to Chingosho, only 19 African countries have acceded to the Cape Town Convention. “Let us implement the Cape Town Convention that enables airlines to buy new aircraft with cheaper price,” he said.

Despite all the challenges, a number of African airlines are renewing their fleets. Ethiopian Airlines, Kenya Airways, South African Airways, EgyptAir, Royal Air Maroc (RAM) and Air Algerie are buying new generation aircraft.

In August 2012, Ethiopian became the first African airline and the third carrier in the world to acquire the Boeing 787-8 Dreamliner. Kenya Airways is gradually taking delivery of nine Dreamliners. RAM and Arik Air of Nigeria are also expecting to take delivery of the state-of-the-art aircraft.

Although Africa's safety record is much improved, there are still challenges when getting insurance in this part of the world.

Barbara Cockburn reports.

TAKE COVER – IF YOU CAN

The non-informed observer might think that Africa's aviation safety record was appalling and, therefore, insurance premiums would be so high as to be prohibitive. Actually, he (or she) would be wrong.

Africa's safety reputation is doing remarkably well and the continent is not a region where obtaining insurance for private jets or commercial airliners poses any more challenges than anywhere else in the world.

According to the International Civil Aviation Organization (ICAO) 2014 Safety Report, figures from the Africa-Indian Ocean regional aviation safety group (RASG-AFI) show that although Africa does have the highest regional accident rate, by putting this into context on a global scale, the region also accounted for the lowest percentage of global traffic volume.



This is probably due to ICAO's comprehensive regional implementation plan for aviation safety in Africa (AFI Plan), which was established in January 2008 to support states in addressing aviation safety deficiencies.

In 2013, ICAO recognised that the AFI Plan had begun to demonstrate positive progress in enhancing aviation safety on the continent. As such, insurance in this region is no more complicated than in Europe, the United States or Middle East regions.

Karim Sfeir, executive director, Willis Aerospace in the Middle East, said: "Typically, the common challenge that unites aircraft operators all over the world is their safety record and accident history, which affects their insurance purchasing.

"But airlines and private jet operators in Africa today have a relatively good performance in terms of safety record, due to a dramatic

Common claims

For private aircraft and corporate jet operators:

- Minor damage to the aircraft due to the operation of machinery around it;
- Leaks in the lavatory.

For commercial airlines:

- Minor damage to the aircraft due to the operation of machinery around it;
- Passenger claims: baggage and damage to personal goods.

What types of insurance are needed?

An aircraft operator would typically need to insure the following:

- Damage to assets, mainly aircraft, especially if banks/financiers are involved in financing;
- Exposures to passengers and transported goods;
- Exposures to third parties, for example passengers or relatives of a passenger, that may suffer a loss in connection with these operations;
- Crew accidents

Insurance for operators' exposures can be purchased with various levels of coverage but is typically made up of a combination of insurance policies. These include: hull and spares all risks and aviation liability insurance, hull war insurance, hull deductible insurance, excess war and terrorism liability insurance, and crew personal accident insurance.

improvement in safety standards driven by initiatives from the operators themselves and by civil aviation authorities."

His colleague, Steve Doyle, business development and sales director based in Willis' London office, agreed that Africa poses no more complex challenges than other regions of the world from an insurer's point of view.

He said: "Challenges in Africa are not really different to say, the Middle East. It's all relatively consistent. [As brokers] we consider loss records, pilot training, safety, infrastructure, management, investment, aircraft age, and maintenance. The criteria is fairly straightforward for anywhere."



However, he observed that Africa was different in one aspect. "If you look at Africa as a continent, there are around 54 countries or states and as many governments and regulatory requirements for airlines within each. With all these different infrastructures there are challenges with having a coordinated strategy across the continent. But, if you look at China, India or America, there is just one government, one strategy and one commitment to an infrastructure that's consistent across the country or continent."

Sfeir said that perceptions need to change: "The interests of insurers in a risk pool are influenced by information available publicly, or issued by aircraft operators, and the perception of the country where the operator is based and its reputation," he said.

"Some of the countries from which aircraft operate have not been able to fully promote themselves because of political instability, wars or dictatorial regimes," he added.

Another challenge for aircraft operators is to



“Challenges in Africa are not really different to say, the Middle East. It’s all relatively consistent. The criteria is fairly straightforward for anywhere.”

STEVE DOYLE

get insurance coverage for operations in zones of conflict. Sfeir said: “There will always be insurance made available to aircraft operators, irrespective of where they are based and no matter how difficult their operation may be. However, the cost would certainly be a major factor in determining the viability of these operations.”

Doyle added that the average age of aircraft on the African continent was getting younger and, therefore, they were becoming more technologically advanced. “Significant improvements regarding safety have been observed. Improved infrastructure has meant that pilot training is more rigorous,” he said.

□□□□□

Virgin Atlantic flies into two destinations in Africa, serving Nigeria and South Africa. Its business continuity manager, Brenda Piggott, said that it hadn’t encountered any challenges in getting insurance for its operations in the region.

When asked if it was more expensive to fly to Africa than, say, the United States, she explained that Virgin’s aviation insurance policy was not worked out as simply as comparing its flights in one country or another.

“Brokers work out a policy for us based on the information about the flights we operate. They don’t break it down in countries because that’s not how the premiums are worked out. Brokers get us the best price based on what we say we want.”

She said that an airline has an operator’s licence, which dictates how it operates and to which cities it can fly. Added to that, insurance is based on what kind of airline it is as to whether slots are given. She explained that this would depend on how well its fleet was maintained and the type of aircraft flown.

As the Ebola virus outbreak worsens, we examine the impact on air passenger travel and medical evacuation possibilities.

Caution the watchword as Ebola outbreak worsens

The outbreak in west Africa is affecting air travel as some airlines have now refused to fly into Ebola-stricken zones and the international media have suggested that passengers are in a blind panic about whether they are sitting next to someone with the virus.

The number of people killed by the outbreak had risen well beyond 5,000, according to latest figures from the *World Health Organisation* (WHO) as *African Aerospace* was going to press.

Ebola was first discovered in 1976 and reemerged last year in the forested zone on the borders of Guinea, Sierra Leone and Liberia. It then spread to Nigeria.

There is currently no vaccine (although work is on-going) for the disease, which is a viral haemorrhagic fever causing symptoms such as headaches, vomiting and diarrhoea that can rupture blood vessels, causing internal bleeding.

The WHO described the outbreak as a “public health emergency of international concern”.



However, it expressed concern that a “growing number of countries and airlines are severing links to three West African states” and urged governments not to impose blanket bans on trade and travel on countries affected by Ebola.

The International Civil Aviation Organisation (ICAO) reassured passengers and the airline industry that the risk of becoming infected with the Ebola virus while on a flight is remote.

According to the WHO, this is because “unlike influenza or tuberculosis, Ebola is not spread through airborne transmission. [It] requires direct contact with blood, secretions, organs or other body fluids of infected living or dead persons or animals, all of which are unlikely exposures for the average traveller. The virus is only transmitted by people already suffering from Ebola, at which point they generally are too ill to travel.”

Insurance claims over Ebola

Given the much-publicised Ebola virus outbreak sweeping across west Africa, how might it affect an airline's insurance?

Heather Manson

(right), director of law firm Norton Rose Fulbright's South African practice aviation team, said an incident like Ebola might have an impact on insurance claims, including landing permissions having been withdrawn from various airports, or a passenger claim if there was a health scare on the aircraft.

In this instance, she noted, there could be claims for damages arising from infection from another passenger while in flight.

She explained that the passenger claimants would be required to establish negligence or fault on the part of the airline in order to sustain a claim. Grounds for negligence would result if the airline did not take reasonable steps at check-in to ensure that any passenger with Ebola symptoms was denied boarding; if, during the flight, it failed to isolate any passenger with Ebola symptoms; or after the flight if it failed to notify fellow passengers upon diagnosis of an infected passenger.

However, she added: “Given that there is (currently) no general obligation on airlines to screen passengers, it will be difficult for a claimant to establish negligence in failing to do so. In addition to establishing fault on the part of the airline, a claimant would have to prove that he (or she) contracted Ebola while in flight, proving that the infection occurred during a flight or during the period of embarkation or disembarkation. I anticipate that a claimant would face difficulty in proving both the elements of fault and causation.”

Any litigation is, as yet, untested.

Virgin Atlantic's business continuity manager, Brenda Piggot, said: “The airports do the screening for Ebola. Airlines are governed by rules in order to arrive into a country. The airports and governments are the ones that would dictate that.”



The WHO added: “States must take measures commensurate with the risk, rather than take blanket measures to cut off travel and trade.”

UK flag-carrier British Airways (BA) pulled out of Liberia and Sierra Leone in early August. This was because, explained a spokesperson, “of the health situation in both countries and also because we couldn't get the medical facilities for our crew and ground staff in the event of one of them having a slip, trip or a relatively routine illness/condition, which required a hospital visit while down route”.

He said: “The reason only those two countries were suspended was because, in the rest of the Africa, we could access the same medical facilities for our crew and ground teams as per usual.

“We have extended the suspension of our flights to and from Liberia and Sierra Leone until the end of March, 2015, due to our continuing concerns about the health facilities in both countries.



“The safety of our customers, crew and ground teams is always our top priority and we will regularly reassess the routes.”

Conversely, Virgin Atlantic, which flies into Nigeria, continues its operations. Business continuity manager, Brenda Piggott, said: “There are no challenges because of Ebola. Ebola isn't like bird flu where it was airborne, [which posed] different issues.

“Our insurers don't have any concerns that we fly to an area affected by Ebola.”

Kenya Airways issued an update on its west Africa operations after consulting with IATA, WHO and the Kenyan Ministry of Health. It said: “There should be no general ban on international travel or trade.

“So far Ebola has not been declared an epidemic/pandemic. No travel bans or advice have been given or recommended.”



And it noted the WHO advice to travellers was unchanged: “The risk of a tourist or businessman/woman becoming infected with Ebola during a visit to the affected areas and developing the disease after returning is extremely low, even if the visit included travel to the local areas from which primary cases have been reported.”

Many flying doctor services are refusing to provide medical evacuation (medevac) services for patients with Ebola symptoms. Healthcare and medical assistance service provider International SOS said in a statement: “International evacuation should not be considered as feasible for patients with active clinical symptoms of Ebola.”

And flying doctors Flight Ambulance International (FAI) is just offering tarmac transfers and no bed-to-bed service in the affected countries.

The organisation issued a statement which said: “Ebola virus disease cases in west Africa are rising faster than the ability to contain them and experts warn that the exponential rise could become a worldwide disaster.

“FAI policy in this matter is unchanged: While we will not transport confirmed or suspected Ebola cases, FAI will continue to fly into Sierra Leone, Guinea and Liberia and neighbouring countries and offer medevac/repatriation services for patients with other confirmed diagnoses.”

2014 Ebola Outbreak in West Africa - Outbreak Distribution Map.

all in a day

PEOPLE / PERSONNES

Juan José Andrés Alvez

Marcelle Nethersole *speaks to
Swissport International's
executive vice president Europe,
Africa and Latin America.*



1

■ Can you tell me a little of the company background?

Swissport International is the leading global airport and aviation service provider in terms of quality, reliability, safety, innovation and network coverage. We provide an all-inclusive service package in addition to managing integrated collaboration models.

We provide ground services for around 224 million passengers and 4.1 million tonnes of cargo a year on behalf of some 700 client companies in the aviation sector.

With a workforce of around 55,000 personnel, Swissport is active at 265 airports in 45 countries on five continents and generates a consolidated operating revenue of CHF 3 billion (\$3.07 billion).

2

■ Where do you operate in Africa?

We have been operating in Africa for more than 15 years. Currently we have large operations in South Africa, Tanzania, Kenya, Algeria and Morocco.

In all those markets we provide both ground and cargo handling services to a large range of airlines, both African and global.

Besides that, we provide aviation security services in Nigeria, South Africa and Cameroon through our specialised company and brand Checkport.

This year we'll start up operations in Ghana and, potentially, Angola, with the goal of keeping on expanding our footprint and offering an end-to-end product portfolio on the whole African continent. In this regard, markets like Nigeria, Senegal, Ivory Coast, DRC and Ethiopia are on our radar for potential expansion.

3

■ What are the challenges of working within Africa, such as any security problems?

Africa is developing rapidly and we are positive about its growth outlook. However, the airport infrastructure is still underdeveloped in many countries.

From a geo-political point of view, it's not completely matured in all the markets and that creates volatility and uncertainty on some of the medium-term countries' agendas on transportation and aviation.

It also requires special efforts to recruit and train staff, areas where we are investing a lot; not only on the technical training but also in leadership and customer care.

Having said that, the potential is enormous and we are committed to support the authorities and the airlines to further develop and strengthen the aviation and ground-handling sectors.

4

■ How do you see the African market within this field in the future?

We envisage Africa will see a more rapid ground-handling liberalisation process than other regions, such as Asia or Eastern Europe. The protectionism is lower and the determination higher; African governments and authorities are greatly capitalising on lessons learnt from those processes in more mature markets like Europe and the US.

The process is quite advanced on the airports' side and less on the airlines.

We foresee a consolidation on the ground-handling arena that will result in a greater number of regional and international players operating in Africa.

Our ambition is also to move into more strategic cooperations with the African airlines, and to offer them a pan-African or even global added-value proposition. In regard to this, we are in conversations with South African Airways, Royal Air Maroc and Fastjet, among others.

5

■ What does a typical day involve for you and what challenges do you face?

I like to understand the local challenges and to be close to the country organisations, so I travel a lot to support them on their development objectives.

I, and my team, spend most of our time presenting, jointly with the local management, how Swissport can support authorities and airlines to streamline, optimise and tailor their ground-handling activities in line with their visions and product.

Swissport International is a highly decentralised company but at the same time has a strong global and customer-centric culture. We have developed a robust "standardised" operational platform called 'Swissport Formula' to support the countries operationally.

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