

AFRAA News!

"Better Skies for Africa"

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Navigating Turbulent Skies



Abdérahmane Berthé, AFRAA Secretary General

2020 started off on a turbulent note, owing to the rapid spread of the COVID 19 that has seen unprecedented impact on the air transport industry and economies globally. The African Airlines Association identifies with and joins the rest of the world, and specifically the global aviation industry, in collaborative efforts to deal with and attempt to contain the universal pandemic of COVID-19.

As at 17 March 2020, a total of 2,108 COVID-19 cases in 26 African countries had been reported. The global economic impact of the COVID-19 outbreak is set to be more profound than that of severe acute respiratory syndrome (SARS), a similar virus that spread from China in 2003, owing to the much larger role that China plays in the global economy today. However, much depends on the duration of the disruption. At this point, more and more governments are imposing quarantine measures and economies are experiencing reduced activity. Demand for air travel has been negatively affected by the COVID-19 outbreak, which has resulted in airlines making substantial schedule changes.

AFRAA strongly recommends that African airlines engage their stakeholders to develop an all-inclusive proactive response strategy that addresses the adverse impact of the COVID-19 on their business. The global trends show that the impact of the COVID-19 is going to be severe, in fact there are already casualties of this pandemic in the likes of airlines that have ceased operations and countries that have gone into complete lockdown. It is our collective responsibilities as airlines to ensure that our industry in general and our businesses in particular are given the highest priority in the allocation of resources and in turn in the execution of effective rescue plans.

In view of the toll of COVID-19 on the aviation industry and global economy at large, AFRAA urges African governments to consider the compensation of inevitable losses, the alleviation of exogenous operating costs, and the subsidization of the African airlines in a bid to assure the industry's viability.

In light of the proactive protection measures and travel restrictions, AFRAA has rescheduled dates for events, meetings and workshops that had been scheduled to take place up to May 2020. The 9th Aviation Stakeholders Convention to take place on 26-28 July 2020 in Nairobi while the dates of other affected meetings and workshops shall be communicated in due course.

AFRAA Highlights of the Month

Routes and AFRAA sign agreement to help drive growth for the Africa aviation market

The African Airlines Association (AFRAA) and Routes signed their first formal agreement in history. The Memorandum of Understanding (MoU) sees AFRAA, the leading trade Association for African airlines and Routes, the organizer of the leading route development events for the industry, work together to stimulate new air services and champion the African aviation industry.

Projections have indicated that, within the next 20 years, the African continent will be one of the fastest-growing aviation markets - accounting for 334 million passengers by 2037. Under this partnership which demonstrates the growing importance of African aviation industry, AFRAA and Routes will work jointly on sharing of data and analytics, promotion of key issues that are affecting airlines and airports within Africa, access to media opportunities among other mutually beneficial actions.

Mr. Abdérahmane Berthé, AFRAA Secretary General said, "This MoU is beneficial to support the development of aviation in Africa which is growing at above global average rates but accounts for less than 3% of global traffic. Strong partnerships among industry stakeholders are instrumental to the realization of African aviation's potential which will result in economic and social benefits for the continent."

Berthé added: "Among our new strategic objectives is to become a hub for data intelligence and expertise on the African Aviation Industry. African airlines have to keep up with the developments through proper information management and data intelligence. We count on the data and analytics support from this partnership to back this objective."



Mr. Steven Small, brand director for Routes, said: "We are delighted to have established a formalized agreement with AFRAA, following many years of working closely together. The synergies in values between our organizations, regarding driving a sustainable air transport industry for the African region, makes this a powerful partnership that we are excited to develop."

Small added; "For over a decade, Routes has recognized the importance of enhancing intra-Africa connectivity. We are delighted that senior leaders from AFRAA will continue to support and join us at our future events.

AFRAA advocates for a better business environment to support the Air Transport market in Africa



Dakar, Senegal – The African Airlines Association (AFRAA), the trade association of airlines from the member states of the African Union is advocating for a sustainable, interconnected and affordable air transport in Africa where African airlines become key players and drivers to African economic development.

In his visit to Senegal, Mr. Abdérahmane Berthé held meetings with some aviation stakeholders on developments in the region and took part in the third meeting on

operationalization of the single African air transport market (SAATM) which was hosted at AFCAC headquarters.

Speaking during a session with media, Mr. Berthé said:

"Aviation in Africa is a fast-growing sector that holds great promise for the continent's economic prosperity. African carriers will only become profitable and globally competitive when all stakeholders in the ecosystem adopt best practices that establish a conducive environment to help airlines grow and reclaim Africa's most profitable routes which are currently dominated by foreign carriers."

According to 2019 AFRAA Annual report, air transport in Africa currently supports 6.2 million jobs and \$55.8 billion of GDP and is expected to grow at a rate of 4.6% annually for the next 20 years. This growth in traffic is increasingly being matched by route expansion by African airlines.

He added that the association had witnessed the renaissance of the air transport market in West Africa exemplified by the revival of defunct carriers and the rollout of ambitious expansion plans reiterating AFRAA's commitment to support carriers in the region realize growth objectives.

In a presentation during a media roundtable, Mr. Berthé highlighted the fact that African airlines still struggle with many

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challenges including high taxes and charges imposed by governments, poor intra-Africa connectivity and market access limitations, blocked funds which are monies generated by an airline in foreign operations that cannot be moved for any reason as well as overpriced jet fuel just to name a few. These conditions according to data negatively impact on the ability of African airlines to grow their footprint and offer competitive fares to passengers to grow their traffic.

It was noted that Africa's remarkable growth opportunity will be greatly unlocked through regional integration in the continent. The Single Africa Air Transport Market (SAATM), the African Continental Free Trade Agreement (ACFTA) and the Free Movement Protocol for people and goods are flagship projects which are expected to enhance intra-African connectivity, thereby facilitating travel, trade, tourism, business and socioeconomic development across the continent.

AFRAA whose membership comprises all the major intercontinental African operators representing over 85% of total international traffic continues to implement initiatives geared towards raising safety and security levels, enhancing cooperation among African airlines, addressing airline cost drivers, particularly taxes and user charges, and ensuring there is sufficient infrastructure and skilled staff to support the traffic growth in the continent.

Aviation leaders at the Africa Aviation Summit call for collaboration to achieve a sustainable air transport market

Addis Ababa, Ethiopia - The African airlines association (AFRAA) joined key African and global stakeholders at the Aviation Africa summit which is a continental platform of engagement to discuss and debate key issues to advance the air transport market in Africa. Convened under the theme 'Creating a sustainable future for Africa's aviation industry - Financially, operationally and environmentally - how Africa must adapt for tomorrow's world', the two-day summit held in Addis Ababa brought together leaders across the civil aviation sector, airline CEO's and major stakeholders in the sector.

In his remarks, AFRAA Secretary General Mr. Abderahmane Berthé noted that connectivity is intricately linked to trade, business development and tourism but ccurrently, Intra-Africa trade is modest at 16%, which is low compared to Europe (64%) or Asia where it is above 50%.

"Currently, up to 22% of Africans traveling between two African cities are forced to travel through non-Africa HUBs either in Europe or in the Middle-East. This situation can be reversed through increased networks and coordination at African hubs which will positively impact intra-African tourism flows."

He added that to give better skies for African airlines and African citizens, the air transport market required transformation and a conducive regulatory environment if the huge traffic growth projected for the next 20 years is to be realized.

Highlighting the conference theme, creating a sustainable future for Africa's aviation industry, Tewolde GebreMariam, CEO of Ethiopian Airlines in his keynote speech stated that African aviation have many opportunities, but also face challenges that the sector must face together to ensure a sustainable aviation future.

"Our main challenges include the attitude to aviation by African governments. We need support from governments, taxes need to be reduced and infrastructure needs to improve. We depend on aviation to connect ourselves and the world. For trade, business investment and tourism, other modes of transport cannot serve



us well, African governments have to support aviation," he said. "African airlines also need to cooperate with each other as there is a lack of it right now. We currently only command 20% of the global market share, and that is painful. This means we don't have the mass, so it is time for us to cooperate with each other."

GebreMariam also touched on the current coronavirus challenge, which was a trending theme at the conference, discussing what it means to the aviation industry. "The coronavirus is a huge challenge. We are seeing a 20% decline in demand; this is a big shock. However, we are used to these kinds of shocks and we have the experience to overcome this. For us this is a temporary problem, we have faced disease, natural disasters, and sudden spikes in oil prices, and we have the capabilities and skill to recover."

Delegates at the forum debated existing and new challenges as discussions surrounding coronavirus, sustainability, and the need for more open African skies. The resounding message was that all stakeholders must cooperate and collaborate to achieve a sustainable aviation future.

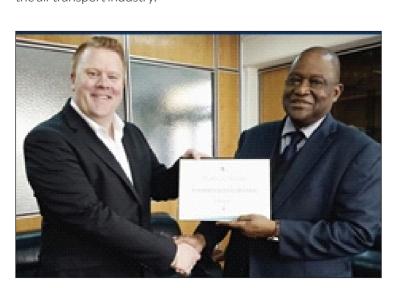
AFRAA's Diary

AFRAA and AACO Secretary General's meet to discuss areas of collaboration

AFRAA Secretary General, Mr. Abdérahmane Berthé, met the Arab Air Carriers Organization Secretary General, Mr. Abdul Wahab Teffaha, on 28 January 2020 to discuss areas of collaboration for the benefit of their member airlines and the development of air transport industry. The meeting was kindly hosted by EgyptAir Chairman Capt. Ahmed Adel, Chairman & Chief Executive Officer at the EgyptAir headquarters in Cairo – Egypt.

The Secretary Generals accompanied by their leadership teams exchanged ideas on best practices and initiatives to advance the air transport industry on issues such as taxes, fees and charges, training and capacity development, safety, liberalization, environment, security, among others.

The two associations also shared insights on cost containment initiatives and joint projects for the benefit of their members and pledged their commitment to collaborate for the development of the air transport industry.





AEG Fuels meets AFRAA

Following the recent enrolment of AEG Fuels on AFRAA Partnership programme, Mr. Paul Walker – AEG Fuels Director of Sales, paid a courtesy visit to AFRAA to discuss areas of collaboration and plans for the year 2020. The Partnership certificate was presented by AFRAA Secretary General, Mr. Abdérahmane Berthé. AFRAA welcomes AEG Fuels to its fraternity.

African Skies Magazine Highlights

AFRAA's approach on taxes, fees, and charges for better skies in Africa



Aviation in Africa is a fast-growing industry that holds great promise for the continent's economic prosperity. Air transport in Africa currently supports 6.2 million jobs and \$55.8 billion of GDP and is expected to grow at a rate of 4.6% annually for the next 20 years. This growth in traffic is increasingly being matched by route expansion of African airlines.

However, African airlines still struggle with many challenges, key among which are high taxes and charges. These challenges negatively impact the ability of African airlines to grow their footprint and offer competitive fares to passengers to grow their traffic.

As a result of expensive fuel prices, prohibitive airport fees, excessive air navigation charges, African airlines' available seat-kilometre costs are much higher than the industry average. African air carriers operate their flights with seat-load-factors much lower than the industry average and while they have been focusing on increasing their market shares. To that end, their charged-fares yield lower revenue per passenger-kilometre against those of carriers in other regions on comparable distance city-pairs. Consequently, African airlines' bottom lines continue to be negative since 2009.

Read more

Air transport in Africa: AFRAA perspective



The African continent is home to 17% of the global population but its air traffic accounts for less than 3% of global traffic. African airlines lose an average of \$1.54 per passenger carried while globally airlines earn \$6.12 per passenger carried. Today, in several parts of the world you can fly for 1.5 hours for less than \$100 while in Africa total taxes on the ticket are often higher than \$100. Passenger traffic between Africa and the rest of the world is dominated by non-African carriers often charging exorbitant fares.

Out of 55 African states, only 8 have direct flights to more than 20 other African states. Quite often, the passenger is obliged to transit through one or several stopovers. This data should challenge all stakeholders to commit to creating a conducive environment for the development of air traffic in Africa.

Main challenges for African airlines

The air transport industry is facing a host of challenges:

- High operating costs due to high taxes on ground and in air;
- Inadequate infrastructure;
- High price of fuel compared to the rest of the world;
- High level of taxes on airlines and passengers;
- Restrictions on traffic rights;
- Restrictions on visas to passengers.

Read more

Revenue growth opportunities for African airlines

Revenue management is one of the main drivers of an airline, determining its profitability and long-term success. The key is to have the right product for the right customer at the right time for the right price. Therefore, evaluating and transforming data into information, which defines customer profiles and predicts consumer behavior, allows airlines to customize products and to maximize revenue growth. Lufthansa Consulting's long-term market expertise, not least in Africa, has shown that the African air transport market is different compared to any other air transport market in the world.

There is a natural need for air transport in Africa due to its geographical situation and tremendous growth potential driven by a young and growing population and one of the fastest urbanization areas in the world. Nevertheless, the African environment is characterized by relatively weak demand indicated through an average load factor of only 68% in 2018 according to Air Transport Action Group's (ATAG) Annual Report 2018. Additionally, the African air transport market is marked by high operating cost. Therefore, Catrin Drawer, Head of Market Africa at Lufthansa Consulting, underlines that 'revenue Optimization is of high importance for all participating airlines when considering the characteristics of the African market.'



Read more

Self-leadership in Aviation

Today aviation needs more than ever innovation in management of change. Hyper connectivity and constant change impact the way we work and do business. They impact the role of management. As managers, we are constantly confronted with paradoxes.

Innovation has become crucial for companies. This is in part due to the unprecedented speed at which knowledge is now created and circulated. Information and even knowledge are at our disposal wherever we are, whatever the time of day. This modern quest for innovation tends to surpass the focus on quality. Whilst companies still push for both innovation and quality, the focus on innovation has recently gained the upper hand.

For example, many companies willingly release innovative new products even though they know they will have to recall

thousands due to defects. It has become more important to be first to market with an innovative product and then gradually improve it with the help of customers, rather than waiting to produce the perfect product before introducing it to the market.

But in reality, quality is still crucial for the reputation of the airline company. And the failure cost can be dramatic. The Boeing 737 Max is a recent example of such 'myopia in innovation management'. The two fatal Boeing 737 Max crashes reveal how top management focused on "Speed to market instead of quality, cost-control instead of innovation, and efficiency instead of transparency" (Campbell, 2019).

Interview with Paul Stein, Chief Technology Officer, Rolls-Royce plc

Despite being responsible for only 2% of global emissions, aviation is the target of increasingly prohibitive environmental levies. Does this skew the picture away from where the world should be looking?

All industries need to revolutionize to support our growing, increasingly urban population. We have entered an era where sustainability is key to not only economic survival but for us as a species. Global passenger traffic is increasing by 5% YoY, Africa alone will need an addition 1,000 aircraft within the next 20 years. As a leading industrial technology company, our activities have a profound effect on society and the environment and we are at the forefront of developing innovations that mitigate industrial impact. The Advisory Council for Aeronautics Research in Europe has set a target to reduce CO2 per passenger-km by 75% by 2050, and as such we have set ourselves the target of 30% reduction in specific fuel consumption, compared to the first Trent engines.

Over the past two decades, improvements to the power plant and in particular, the gas turbine, have been the driving force towards efficiency gains and greener aviation. How much more can the envelope be stretched to make the gas turbine leaner and greener?

Rolls-Royce has been pioneering flight for over 100 years, we created the first turboprop, first jet engine, powered the first passenger airliner, and powered the first and only commercial supersonic jet (Concord).

We've crafted seven variations of our world-leading Trent family since its launch over two decades ago; each has pushed the boundaries of what is possible. The gas turbine remains essential to our future – the Trent XWB which powers the Airbus A350 is the most efficient in-service aero-engine ever created and will be flying for decades. We are now taking this proven technology through another evolutionary step.

The Ultra fan™ will be 25% more fuel-efficient than the first Trent engine, with a new geared architecture and bypass ratio treble that of the Trent 700. The fan blades will be manufactured from the very latest carbon/titanium composites.

Electric propulsion has been proposed as the future of aviation. But to what extent can it be a substitute to the gas turbine?

Electrification is impacting many transportation systems and is set to have a similar impact on aviation as when gas turbines replaced piston engine propulsion.

For medium to long haul flights with larger aircraft, the gas turbine will remain the main source of thrust as only chemical fuels can deliver the power required for such heavier aircraft.

However, electrification will enable simplification of gas turbine internal design, unlock new methods of managing aircraft drag, and open new benefits at platform level.

Rolls-Royce has recently acquired Siemens' electric propulsion business. What are the current limitations of electric propulsion and to what extent can they be addressed in the foreseeable future?

The recent acquisition of Siemen's electric and hybrid-electric aerospace propulsion business, known as e-aircraft, is a fantastic opportunity and has strengthened our capabilities.

We are engaged in several electrification programmes, for instance: Our E-Fan-X programme will demonstrate hybrid electric flight by replacing an engine from a 100-seater jet with a 2MW Hybrid Electric Propulsion Unit, powered by a gas-turbine-driven 2.5MW generator and a battery system. This will be the world's most powerful flying generator.

Another example is the ACCEL programme which we hope will break records and be the fastest-ever, all-electric aircraft reaching a speed of 300+Mph. This will require the most powerful battery ever built for flight, powerful enough to beat speed and performance records, light enough to fly, and stable enough not to overheat.

Our current view is that weight will limit all-electric flight to small aircraft flying short-range missions. Larger aircraft flying higher loads on longer ranges will need to be powered by gas turbine technology for the foreseeable future with an increasing degree of hybridization over time.

Besides unmanned air vehicles, what large scale applications in commercial aviation can electric propulsion feasibly support in

the near term?

Soon, we shall see electrical, vertical, take-off and landing aircraft (EVTOLs) demonstrating the same versatility of helicopters. Many of the early concepts rely solely upon battery power and require extensive charging infrastructure. But, as battery technology improves these aircraft will fly longer ranges and at higher speeds. The projected market size for early versions is roughly £1bn per year.

The projected market size for early versions is roughly £1bn per year.

Rolls-Royce's hybrid EVTOL is based around the hybridization of

our M250 engine, capable of carrying 4 to 5 people and travelling

at 250 mph over a range of over 805 kilometers (500 miles).



The industry has also been pushing for the development of sustainable aviation fuels. From an engine manufacturer's perspective, what hurdles need to be overcome before these fuels can be considered a viable alternative to fossil fuels?

Rolls-Royce is committed to doing what it can to support and accelerate the availability of Sustainable Aviation Fuels (SAF), including the development and certification processes. Our engines can operate on any alternative fuel that has the same characteristics as kerosene.

Several Rolls-Royce airline customers already use blended fuels (SAFs with fossil). EgyptAir's recent delivery flight of their 5th Rolls-Royce Trent 1000TEN powered Boeing-787 was fuelled by Sustainable Aviation Fuel.

IATA has also set itself rather ambitious emissions reduction goals. What mix of technologies will it take to meet those commitments?

There are three fundamental pillars that lead the decarbonization of the aviation sector: Continuous development of aircraft and engine technology to improve efficiency; development of low carbon alternative fuels; development of novel aircraft and propulsion technology, including the electrification of flight.

We are continuously driving fuel efficiencies in today's products, achieving an average of 1% increase in fuel efficiency each year. This is thanks to advanced analytics from data collected from engine health monitoring which shows us how well an engine is functioning. We can then advise our customers how they can optimize fuel efficiency and whether an engine requires maintenance.

In Africa, Rolls-Royce tends to be associated more for its aviation. How big and diverse is your product portfolio on the continent?

Rolls-Royce is dedicated to delivering vital power, in whatever form. We have three divisions, civil aerospace, defense and power systems.

Our civil aerospace division has supported African aviation for almost 100 years. Today we serve 20 operators, powering over 60 widebody aircraft, with another 50+ aircraft on order. Rolls-Royce powered 'flying hours' in Africa has increased by over 50% over the last five years.

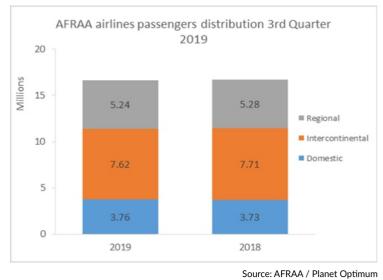
Our Power Systems business provides innovative solutions ideally suited to meet Africa's rapidly growing societal demands for energy and mobility. We provide a range of power generation solutions and capacities for any electrification requirement. From standby power generation sets for hospitals and data centres to rural hybrid micro-grid solutions and highly efficient power plants delivering electricity to towns and cities.

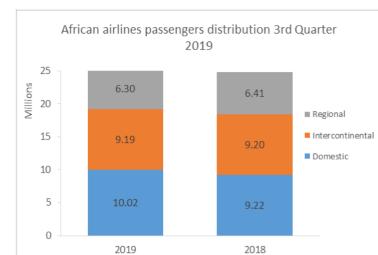
We employ 120 people across Southern Africa, with offices in Cape Town, Johannesburg and a regional office in Zambia, as well as satellite offices strategically situated to serve our customers. Rolls-Royce's Defense business is a market leader in aero-engines for military transport and patrol aircraft with strong positions in combat and helicopter applications. We have a significant scale in naval markets across the world and pride ourselves as the technical authority for the through-life support of nuclear power plants for submarines.

Our defense division has retained solid relationships with a number of African countries for many decades, serving many forces, namely Algeria, Tunisia and South Africa. As the world evolves its energy sources to address climate change, Rolls-Royce will be providing solutions. Innovation is at the heart of our culture, and we are adapting to meet the power demands of tomorrow's world.

Air Traffic Stats Q3

Passenger Distribution





Top 10 regional routes by passengers carried 3rd Quarter (AFRAA estimations)

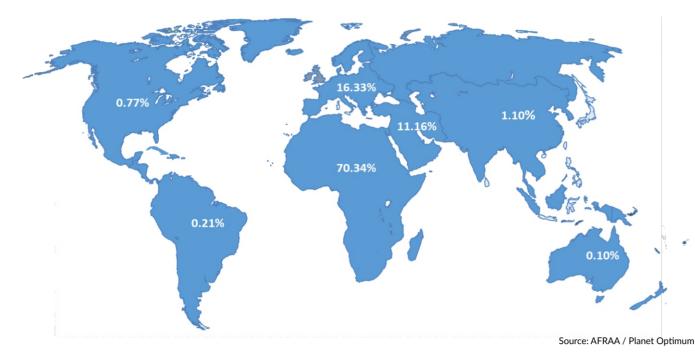
Source: AFRAA / Planet Optimum

Source: AFRAA / Planet Optimum

For AFRAA Airlines, the intercontinental traffic is dominant with 45.86% as most of the major carriers are members, carrying an important part of the intercontinental traffic.

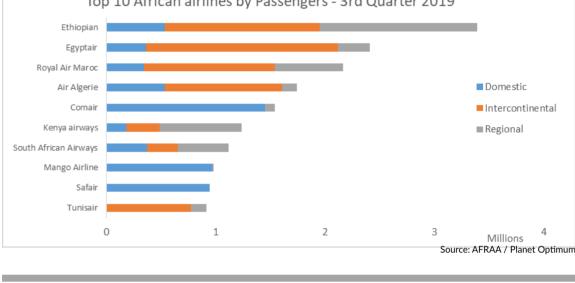
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To/From Africa traffic repartition 3rd Quarter 2019



Top 10 African airlines by Passengers - 3rd Quarter 2019

African airlines ranking by traffic (3rd Quarter 2019)



(AFRAA estimations) 1400

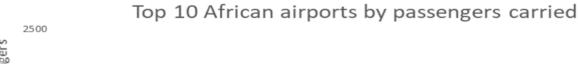
1200

Routes ranking by traffic (3rd Quarter 2019)

Top 10 domestic routes by passengers carried 3rd Quarter 2019







Airport Ranking by Passengers Traffic 3rd Quarter 2019



Source: AFRAA / Planet Optimum

160

140 120

100

60

40

Thousands of Passengers

Thousandspassengers 2000 ■ Jul-19 Aug-19 ■ Sep-19 1500 1000 500 0 Johannesburg Addis Casablanca Nairobi Hurghada Johannesburg and Cairo are the busiest airports in Africa, handling respectively 287 and 175 flights daily. Addis Ababa and Nairobi are also part of the top ranking carrying more than 5 million passengers every year. The only WCAF airport in this top 10 is Lagos. Source: AFRAA / ACI AFRICA Airport Ranking by Freight Traffic 3rd Quarter 2019

40 35 ■ Jul-19 ■ Aug-19 ■ Sep-19

Top 10 African airports by freight carried

Thou sands tons 30 25

Source: ACI AFRICA

For this third quarter 2019, Nairobi Jomo Kenyatta airport handled more than 101 thousand tons of freight. Johannesburg OR Tambo is following with 88.96 thousand tons. Three West Africa are part of the top 10, namely Lagos, Accra and Dakar, which represent an improvement for the region compared to the previous quarter. **Upcoming events**

> AVIATION **STAKEHOLDERS**

Addis



POSTPONED



Kindly take note of the **new dates** and look forward to your participation.

For Sponsorship, Exhibition and Speaking Opportunities, please contact Ms. Maureen Kahonge (mkahonge@afraa.org). For Registration enquiries, please contact Ms. Dicie Okaya (dokaya@afraa.org).

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