

Fostering synergies

Boeing's collaborative approach to Africa's aerospace advancement



oeing's offer to Africa is about much more than selling and supporting airplanes, stresses
Boeing VP Commercial Sales and
Marketing Africa Anbessie Yitbarek.
It includes industrial partnerships, sustainability, and community investment.
"The opportunity for growth of the African aerospace industry is significant", he points out.

Boeing is uncompromising about safety and security, he assures. The airframer works with airlines to continuously share with them risk mitigation tools on major identified risks. It has a long and valued relationship with regional aviation bodies such as the African Airlines Association, better known as AFRAA, and the Airlines Association of Southern Africa, or AASA,

to ensure the sharing of information and best practices. But the company also helps promote aviation safety in Africa in general. It contributes to regional safety initiatives through the Regional Aviation Safety Group, including co-producing the annual safety report. And it has helped many African countries in their efforts to obtain FAA Cat 1 status.

"Boeing works with suppliers in five African countries," he reports. Boeing formed a joint venture with Royal Air Maroc and Safran, called Morocco Aero Technical Interconnect Systems Aerospace, to produce wire bundles and harnesses. Boeing also signed an agreement with South African aerospace company Aerosud, for the latter to manufacture airframe parts for various aircraft. Boeing added another African wire harness manufacturer to its supply chain when it worked with Ethiopian Airlines to set up a new manufacturing facility in Addis Ababa. (Ethiopian Airlines also produces thermo-acoustic insulation blankets for certain configurations of the 737 MAX, via a joint venture with Italian Company Geven-Sky Techno, which is a Boeing supplier).

Boeing is also assisting with boosting research and development across Africa. In South Africa, it worked with the Council for Scientific and Industrial Research to





develop a titanium 'road map' as well as research opportunities to include titanium powder in aerospace manufacturing processes and products. Boeing also inaugurated the first global Ka-band antenna system and tracking facility at what is now the South African National Space Agency's Space Operations facility. Further, in 2023, Boeing signed a Memorandum of Agreement with Morocco, under which it is supplying the Royal Moroccan Air Force with training, equipment and technical assistance to support the establishment of a metrology lab and a composite research centre. The US company is also supporting sourcing and engineering to create an advanced manufacturing research centre in Morocco.

Regarding sustainability, Boeing is working with local and international partners to research, develop and commercialise local sources of sustainable aviation fuels (SAF), he points out. In 2016, Africa's first passenger flights using SAF took place, with Boeing's support, in South Africa, using 737 airliners. In 2023, Boeing and the Roundtable on Sustainable Biomaterials released a study which highlighted the potential for the production of SAF in sub-Saharan Africa, as well as the potential for SAF to drive a just energy transition across the continent while also creating jobs. Boeing is also working to align African science, technology, engineering and mathematics (STEM) education with sustainability, to address the challenges of climate change head-on. Boeing-supported STEM for sustainability education programmes have been launched in Egypt, Morocco and Senegal.

Boeing's investment in African communities, has, since 2008, seen the airframer partner with over 40

organisations to support systemic improvements in education, highlights Yitbarek. Such community investment initiatives have been implemented in the Democratic Republic of Congo, Egypt, Ethiopia, Ghana, Ivory Coast, Kenya, Madagascar, Mauritania, Nigeria, Rwanda, Senegal, South Africa, Sudan, and Tanzania.

Just one of these programmes, a strategic partnership with JA Africa, has empowered 5,000 young people across eight African countries with entrepreneurial and problem-solving skills. Other partnerships in which Boeing is participating are promoting STEM education, providing training in coding, stimulating interest in careers in the space sector, training teachers, and training farmers. The partnership with Link Community Development in Ethiopia is specifically aimed at educating young girls, while 60% of the students in the ThinkYoung Coding Schools (in Ethiopia, Kenya, Rwanda and Tanzania) are girls. The Hand in Hand partnership, in the Kilimanjaro region of Tanzania, is training especially women farmers.

Further, he notes, in cooperation with its airline customers and non-profit organisations, Boeing had carried out more than 70 humanitarian flights to African countries. These had been arranged under its Humanitarian Delivery Flight Program and had carried medicine, medical equipment and educational materials.

Of course, there are also the commercial aircraft Boeing is offering to Africa.

"Airlines in Africa require flexibility in their fleets to thrive in the face of market volatility," Yitbarek points out. "The latest generations of Boeing aircraft provide this flexibility and operating efficiency



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while seamlessly integrating with the existing fleets. The 737 MAX shares pilot, technician and spares commonality with its predecessor, the 737 NG. Once in operation, the MAX provides over 20% fuel burn improvement, a 21% improvement in carbon emissions and a 50% smaller noise footprint. We forecast that more than 80% of African demand for widebody airlines will be in the small- to mid-size category, and the 787 Dreamliner is ideal to meet the need. And for those carriers that require large widebodies, Boeing offers the 777 family, which brings lower operating costs, better passenger economics, and greater cargo capacity than its competitors."

A number of leading African airlines have already experienced these advantages, having acquired the latest-generation Boeing commercial airplanes, Yitbarek highlights. Thus, adopting the 787 Dreamliner has allowed Kenya Airways to implement, for the first time, a direct service between Nairobi and New York. Likewise, the 787 has allowed EgyptAir to institute direct flights between Cairo

and Washington, DC. Dreamliners are also operated by Air Austral, Air Tanzania, Ethiopian Airlines and Royal Air Maroc. And TAAG Angolan Airlines has ordered 787s to modernise its widebody fleet which is currently composed entirely of Boeing 777s.

And talking of the 777, he notes that Ethiopian Airlines has become the first African carrier to order the latest version of the family, the 777X, with an agreement to purchase eight 777-9s, with options for another 12. Earlier models of the 777 are currently operated in Africa by Air Austral, Air Zimbabwe, Alexandria Airlines, CEIBA Intercontinental, EgyptAir and Ethiopian Airlines, as well as the aforementioned TAAG Angolan Airlines.

As for the single-aisle segment, last November Ethiopian Airlines ordered another twenty 737 MAX airplanes, with options for a further 21. Air Algérie ordered eight 737 MAXs in June. And, in October, Air Tanzania took delivery of its first 737 MAX and became the

first African airline to operate the larger 737-9 variant. The carrier received the second of its two 737-9s in March. Taking all generations of the 737 into account, including freighter variants, the type is pretty much ubiquitous in Africa, Yitbarek observes, being operated by 55 airlines, including the abovementioned MAX customers. In addition to 737 freighters, 767F dedicated cargo carriers are serving African operators with distinction.

Naturally, Boeing provides the necessary services to keep current and future fleets operating safely, efficiently and reliably, as well as training solutions for airline staff and modification services to improve the experiences of passengers. These include digital solutions such as the Boeing Maintenance Performance Toolbox, Airplane Health Management, and crew management solutions, plus a wide range of flight deck and operations solutions. These provide African airlines with real-time access to maintenance, flight and aircraft performance information to optimise efficiency and reduce fleet operating costs.