

AFRICA'S OLDEST AVIATION MAGAZINE

MEGATRENDS FOR 2023

LAUNCHINC A PILOT PORTFOLIO CAREER

AT THE HELM OF THE SACAA



WORLD AIRNEWS COMPETITION TIME!

HUNT the logo in our December 2023 Edition. **Win** a Helivate Helicopter Experience! go to www.airnews.co.za to enter.

EPILATUS

atus-aircraft.com

FAST TO YOUR DESTINATION - SLOW TO DEPRECIATION

With more than 1,800 aircraft in the global fleet, the PC-12 has solidified its reputation as one of the best investments in business aviation. And for good reason. Its unique combination of versatility, efficiency, reliability and high residual value make it the star in any flight department. With this kind of momentum, its value is in no hurry to slow down.

Contact Pilatus PC-12 Centre Southern Africa, your nearest Authorised Pilatus PC-12 NGX Sales Centre for further information on Tel: +27 11 383 0800, Cell +27 82 511 7312 or Email: aircraftsales@pilatuscentre.co.za



Our January cover photo of a Gulfstream 650ER is significant in that the OEM manufacturer has started tests on its business jets to fly with 100% sustainable aviation fuel (SAF). Well done Gulfstream! The Check List photo of the SmartLynx Airbus A320-214 - registered ES-SAX – was seen departing Malta International as MYX9616 on its way to Lagos Nigeria. In its Air Peace colours, it ill operate on behalf of the West African carrier from the company's hub.



ARNE//CONTACTS

PUBLISHER: TCE PUBLICATIONS

Tel.: +27 31 564 1319

MANAGING DIRECTOR

EDITOR Heidi Gibson / heidi@airnews.co.za

BUSINESS DEVELOPMENT Hes von Wielligh 7 Tel.: 083 472 8834

Carla Hamman / carla@airnews.co.za Tel.: 084 894 6172

OUR CREW AFRICA

ETHIOPIA - ADDIS ABABA Kaleyesus Békele / kale Tel.: +25 1911 461804 sb@gmail.com

KENYA - NAIROBI Githae Mwaniki / githae.mwaniki@gmail.com

MALAWI- BLANTYRE Frank Jomo / fjomo@yał Fel.: +265 922 0911 GERIA - LAGOS inus Chiedu / output.publications@yahoo.com : 234 803 81 177<u>04</u>_____

UGANDA - KAMPALA Russel Barnes / barnesy@imul.com el.: +256 722 712557

ZAMBIA - LUSAKA umphrey Nkonde / zp el.: +26 0969 179805 andplace@gmail.com

OUR CREW INTERNATIONAL EDITORIAL BRITAIN / EUROPE / BSP EUROPE

MEDIA DIRECTOR Tel.: +44 (0) 1491 628000

ITALY / PALERMO Fabio Gigante / fabgiga@liberto.it el.: 0939 329 360 3665

TANZANIA - DAR ES SALAAM I Mohamed / alm@cta el.: +255 784 474840

ZIMBABAWE - HARARE Wallace Mawire / wmawidri@gmail.com

MALTA - ST JULIANS Chris Cauchi / ckcauch tel.: 00356 9928 2208

AUSTRALIA / ASIA Barrie Collins / collinsphotographic@bigpond.com Tel.: +61 41 711 1729

OUR CREW USA CANADA SOUTH AMERICA

MEDIA DIRECTOR Tel.: +44 (0) 1491 628000

RUSSIA - MOSCOW Yuri Laskin / ylaski@mail.ru or Tel.: 7 495 9121346

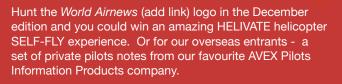
04 Flarepath

- 05 Meet The Megatrends
- 80 Decarbonising Operations Not A Nice-to-have

ARNE//

- 10 SA's Ailing C130 BZ Hercules Fleet
- 14 MEBAA 2022 Business Aviation on the Rise
- 16 Bombardier Breaks Ground
- 17 Launch your Pilot Portfolio Career
- 9 West African Airlines Sign
- 21 Uganda's hero saves lives
- 22 Libya Aviation Forum Event
- $24 \hspace{0.1in} {\rm Up} \hspace{0.1in} {\rm for} \hspace{0.1in} {\rm Auction-Elvis} \hspace{0.1in} {\rm Presley's} \hspace{0.1in} {\rm Jet}$
- 25 EVTOL Flying Taxis of the Future
- 26 Last Boeing 747 Leaves
- 30 SACAA Director Poppy Khoza makes her mark
- $34 \quad \text{Kenya Airways \& Royal Air Maroc}$ Reactivate codeshare
- 36 Hangar Talk

IT'S COMPETITION TIME! HUNT THE AIRNEWS LOGO!



To enter you have to find the 'hidden logos' and count how many there are. Then go across to our wet and wait for the pop-up Competition Entry form. Fill out the form – and state if you are an SA resident or NOT - leave your details and press enter. Only one entry per email will be permitted. The competition will run over the of December and January – but the logos are only found in the December World Airnews Magazine edition. So be sure to subscribe and get your copy of the magazine.

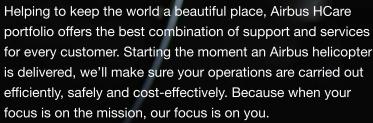
The competition closes on the 31 January 2023 and the winner will be announced in the March 2023 edition of World Airnews





OFFICIAL JOURNAL OF:- Commercial Aviation Association of Southern Airlines Association of South Africa. The Association of South African Aircraft Traders Association of Training Organisations of South Africa, Aerosociation of South Africa, Aerosociation of Association of Aviation Maintenance Organisations, South Africa Society of Aerospace & Environmental Medicine, Helicopter Association of South Africa, Aircraft Owners & Pilots' Associations of Southern Africa, Air side Operators, Association of South Africa, Aerica Applicators Association, East African Commercial Aviation Association, African Aerial Applicators Association, East African Commercial Aviation Association, African Aircan Air Aircan Arian Arian African Association, African Arian Arian African Arian African Arian African Arian African Arian African Arian African African Arian African Association (AFRAA) Media Partner.

HCARE IS A MISSION LIKE NO OTHER



DISCLAIMER:- Opinions expressed in signed articles or in advertisements appearing in World Airnews, are those of the author or advertiser and do not n this journal or of its publisher. The mention of specific companies or products in articles or advertisements does not imply that they are endorsed or reco or its publisher in preference to others of a similar nature which are not mentioned or advertised. World Copyright Reserved.

VOLUME 50 ISSUE 그 **JANUARY 2023**

airbus.com **G S O**



CHALLENGES, CONTROVERSIES & CONGRATULATIONS

implements include:""d_togle_tab2_parent!thteeter provide content ").slideToggle()!i(s(th2)_hastlast pr

By Heidi Gibson

A new year brings new challenges, new controversies and congratulations without which we would never evolve and learn. And it's lovely to learn.

My mind immediately goes to the concept of digital twins and its challenges for the aviation industry.

As everyone knows maintaining an aircraft is a laborious task. Can you imagine managing a fleet? We are talking about carefully engineered parts and complex software systems needed to keep the aircraft safe and aloft.

Nowadays airlines and airports use maintenance, repair, and overhaul (MRO) optimised software to do the job. Data is used to produce analytics on aircraft maintenance schedules. Digital twins are replica aircrafts that make use of sensors to track airplane operations documenting wear and tear simulations using sensors in real time. This data is picked up by mechanics and manufacturers. Thus, preventative events-analysis information is available before issues occur. It's the most critical aviation software development solution available in the industry and it saves time, money and lives. To do all of this, this software must overcome or navigate huge challenges. The digital twin technology must model simple objects and complex object relationships. It must accurately capture physical properties, simulate behaviours and adjusts scales. Digital twin technology must be able to collaborate and communicate with others. It should be self-informed of its size and functionality changes in real-time and change or alter when required. It should be able to detect and react to changes in a real time environment and able to identify and resolve differences to that communication is consistent and accurate.

Then controversy surrounded the issue of the call to ban helicopter flights in Manhattan and Brooklyn in New York city that emerged late last year. Dubbed the 'Stop the Chop' bill it sought to stop tourist flights and allow people to more easily sue helicopter operators whose noise levels were 'unreasonably' high.

The number of flights to and out of the three helipads in downtown Manhattan and elsewhere had risen to about 117 a day. It directly affected those who now work from home due to the Covid-19 pandemic and who no longer have the luxury of double-glazed windows in their offices.

Most of the flights relate to tourist flips that for a few hundred bucks allow visitors to see the city from the sky,

Aviation advocacy groups called for the bill to be vetoed (understandably so) and it made me wonder how far we had advanced and what related issues will raise their heads when electric take-off and land aircraft are 'normal' in our everyday lives – because the future is here.

Perhaps by then those involved in their manufacture would have had to design these aircraft such that noise levels are radically reduced and the general population won't even bat an eyelid about these flying machines purring by.

And lastly congratulations to Boeing. On the commercial front, the most historic order for widebody aircraft United Airlines ever was announced recently - 100 Boeing 787 Dreamliners with an option to purchase 100 more. That can potentially be 200 aircraft. And United expects to take delivery of the new widebody planes between 2024 and 2032.

And International Airlines Group (IAG) has announced that its shareholders approved an agreement with Boeing to order a total of 50 737-8-200s and 737-10s, plus 100 options earlier last year. Now read about how the world of flying has changed for a pilot, the ailing South African C130B Hercules fleet, the MEBAA business aviation show held in Morocco last year and small steps for a SAATM-related agreement in Africa. Lastly, we have our first of many – hopefully – guest column ALMS Group aviation insurance group – all your related questions will be answered. Turn to page 20.



Another power trend is the automation and emergence of smart airports



Ilkka Kivelä, SITA vice president strategy and innovation

MEET THE MEGATRENDS

Several powerful megatrends - from young, highly connected travellers to electric air taxis - will exert an immense influence on air travel over the next decade, forcing industry, governments, and technology to adapt rapidly.

This is according to a new report entitled 'Meet the Megatrends' released by a well-known air transport's IT provider SITA. The report looks at 12 emerging technological, societal, traveller and economic trends that will significantly morph the travel landscape by 2033.

"The air transport industry is at a post-pandemic crossroads, facing challenges from all sides. While the travel recovery accelerates globally, airports and airlines are scrambling to provide the seamless travel experience passengers expect, often with slashed workforces and squeezed budgets."



A key trend identified is Gen Z and millennial travellers driving a digital transformation of the transport industry.

"The climate crisis demands swifter and more decisive industry action to make travel more sustainable. We now have an opportunity to reimagine the world of travel, connect the dots and transform travel with bold solutions that cross sectors and exploit the latest technologies," said Ilkka Kivelä, SITA vice president strategy and innovation.

"A key trend identified is Gen Z and millennial travellers driving a digital transformation of the transport industry, demanding a more integrated digital journey and accelerating the digital way of life. Privacy, digital identity rights, and controls for passengers will be a priority for passengers opening the door to a future where we can travel from everywhere to anywhere without the need for physical documents or being stopped for identification".

Another power trend is the automation and emergence of smart airports, which will reshape the workforce, give rise to a new flattened business organisation and streamlined operations through technology.

By 2030 metaverse operations will be commonplace at leading airports and play a vital role in optimising processes, avoiding disruption and facilitating intuitive, immersive control of intelligent airports.

This, in turn, will require new skills and create new opportunities for employees in the industry.

Meanwhile, electric air vehicles are expected to be ubiquitous at major international airports by the end of the decade, operating as an effective auxiliary service and revenue stream for airports and airlines. This year alone, investment in the Urban Air Mobility industry has skyrocketed, with (US) \$4.7 billion committed to the development of eVTOL vehicles.

"These trends are shaping SITA's own innovation agenda. We're excited to be working across many of these areas and look forward

to collaborating with partners to drive positive change across the industry," said Kivelä

The report was spearheaded by the SITA Lab innovation team and draws upon insights from across the transport industry, global research and the latest cutting-edge proof of concepts. Some of them include the following:

SOCIAL TREND - THE SHIFTING STAFF CULTURE

Entitled 'The Shifting staff culture and the Great Resignation' tracks the trend that began when the pandemic decimated workforces globally with 62 million travel and tourism jobs lost in 2020.

Many workers who resigned or lost their jobs have not returned, leaving a workforce shortage in critical areas like ground handling. The US reported that about 50 million employees resigned last year; the same trend is happening in the UK, France, and Singapore, where work patterns are no longer the same as in the pre-COVID days.

The experiment of working from home and remote locations has changed company culture, likely permanently. Issues stemming from reduced or inexperienced labor forces in the air transport industry include cancellations, delays, mishandled baggage, or long queues at security - all of which threaten long-term industry recovery.

The industry is responding by investment in digitising the passenger journey and the operations supporting that experience. This gives airlines and airports more agility and scalability in their operations, enabling them to better respond to rapidly changing situations. This is being driven through the widespread adoption of biometrics and mobile passenger journeys, as well as more automated operations. This means that fewer employees are needed to complete mundane tasks, and that airports and airlines can direct people to manage more complex or service-orientated tasks.

At the same time, younger generations have embraced the shift to task/outcome-based flexi jobs, prioritising health and wellness and harnessing technology to work more efficiently and flexibly.

Airports and airlines must examine how technology can drive more rewarding outcomes for workers, explore how robotics or automation can replace laborious facets of their roles, and offer remote working via increasingly immersive experiences like Virtual Reality (VR) and Augmented Reality (AR). Tellingly, SITA's 2022 IT Insights survey has revealed a new investment priority for airlines this year: augmented VR for staff, with 9% of airlines confirming major programmes and another 55% that confirmed research and development programmes for last year.

TRAVELLER TREND - THE MILLENNIAL AND GEN Z TRAVELLER

Younger travellers demand a more integrated digital journey, and the industry will be forced to respond. They will accelerate the digital way of life and popularize fringe technologies by 2027.

Many are frequent travellers who are 'self-service first,' and they embrace biometrics and digital passes to benefit from travel efficiency and convenience.

Digital identities, border crossings, and mobile platforms offer ample opportunities for younger digital native travellers who are familiar with using their mobile phone as a remote control for travel; market share will increase as digital natives become a more significant proportion of the passenger demographic, creating a seismic shift towards 'digital first.'

TRAVELLER TRENDS - THE AGING TRAVELLER

We will travel longer into our old age and with more disposable income. This will deepen the demographic of aging travellers who require more assistance throughout the journey. Bespoke technological solutions and bolstered staff resources at airports will be

dedicated to supporting the aging traveller by 2030.

A subsection of technology innovation will emerge designed to address the needs of the senior traveller specifically. Airports and airlines will initiate dedicated teams, training, and processes to cater to a growing demographic of aging travellers, including passenger processing solutions, airport experiences, and end-to-end reliable customer support services.

Despite the impact of the pandemic, IATA research showed an increase in older passengers traveling, with 36% of passengers aged 56 and above in 2021 compared to just 25% in 2019. Aging travellers make up a growing proportion who spend more on travel but also require travel concierge, itinerary management, mobility service, and baggage assistance. The industry must harness suitable technologies to enable them to connect with friends and family quickly, to address travel stress and confusion, and mobility

ECONOMIC TREND – FULL DIGITAL ECONOMY

By 2030 we will see strides forward in retail optimisation with smart retail for terminals, featuring traveller profile and behaviour sensitive retail with spending data analysed for specific flight paths, passenger profiles and spending habits.

Airports will embrace technology like Amazon's 'Just Walk Out' solution, which uses computer vision, sensor fusion, and deep learning to enable shoppers to simply walk out of the store with their purchases.

Today non-aeronautical activity accounts for 40-60% of an airport's revenue, and smart retail technology will further increase this. According to the latest research, there were 295 million crypto users worldwide as of 29 December 2021.

The increasing acceptance of cryptocurrencies on traditional payment platforms and the rise of central bank digital currencies (CBDCs) will push the air transport industry to incorporate digital currencies. Digital currency will also impact the financial side of the industry.

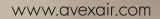
Proofs of Concept are already underway to explore the potential for digital currency transformation and benefits in the air transport industry, for example, IATA Coin. Currency and exchange rates will perform interline invoicing and settlement between airlines, settling loyalty points or rewards, insurance, airport fees, and taxes.

To download the full report go to: https://www.sita.aero/innovation/meet-the-megatrends/ index.html?v=megatrends&c=1 $\label{eq:vector}$

DIGITAL

AVEX PILOT STUDY NOTE

AVEX Information Products has accompanied pilots through their aviation careers for over fifty years. Our Comprehensive and complete *Pilot Study Notes* for Private Pilot and Commercial Pilot Licence students are available in both Aeroplane and Helicopter student kits.





An Avex Group Company

+27 (0)11 974 4855 Email: info@avexair.com



07

DECARBONISING OPERATIONS **IS NOT A NICE-TO-HAVE**

By Yann Cabaret, CEO SITA for Aircraft



The past COP27 conference last year is a stark reminder for the aviation industry of the responsibility they have to take faster action against our changing climate.

The past COP27 conference last year is a stark reminder for the aviation industry of the responsibility they have to take faster action against our changing climate.

It has been more than a year since the aviation industry committed to tackling its emissions through its long-term carbon net-zero by 2050 goal, and the urgency of meeting that target was highlighted by climate protestors rushing the runway of Schipol Airport. We cannot pay lip service to sustainability.

The industry's carbon net-zero pledge is a huge challenge. We know that all of the in-sector emission reduction solutions sustainable aviation fuel (SAF), new zero-emissions energy sources, and new technology aircraft - will not be quickly nor fully in place this decade, except for operational and infrastructure improvements. But we cannot wait a decade to do everything at once.

To implement a clear path for decarbonisation, we must bake it into the course of normal operations, starting now. It cannot be a 'nice-to-have' or an add-on. We know airports and airlines can feasibly take small and incremental steps to decrease emissions by leveraging technology to increase operational and infrastructure efficiencies.

WHAT YOU CAN DO NOW

()8

Reducing the use of fossil fuels in operations is at the heart of the industry's strategy for carbon net-zero, with fuel burn representing most of the industry's emissions.

Fuel is one of the highest costs for airlines today, so efforts to decrease fossil fuel use will naturally reduce emissions and generate significant cost savings too.

Taking advantage of traditional and emerging fuel-efficiency technologies that integrate data intelligence can be easily adopted today to help cut reliance on fossil fuels in flight operations.

An example of these intelligent technologies in action is prescriptive inflight efficiency solutions that use machine learning and leverage historical flight data and weather data to empower airline pilots to make more informed, optimised re-routing decisions. It simultaneously delivers multiple benefits with reduced fossil fuel burn: cleaner air and cost and carbon savings too.

Our customers are already significantly cutting their carbon emissions by leveraging these technologies. For example, Singapore Airlines deployed SITA OptiClimb to help cut aircraft carbon emissions of up to 15,000 tons annually on the climb-out phase just on the carrier's Airbus A350 fleet alone.

The immediate focus of an inflight efficiency tool is on reducing fossil fuel use, the emissions it generates, and the costs. But as carriers switch to sustainable aviation fuels, the focus will shift to optimising sustainable fuels from a cost perspective.

INFRASTRUCTURE IMPROVEMENTS

When intelligence is shared with relevant stakeholders - for example, the supporting infrastructure system players like air traffic management and airport operations, we know the benefits will be even more significant.

While solutions such as SITA OptiClimb or the broader SITA OptiFlight solution started as inflight applications for airline pilots to optimise aircraft flight phases, we can extend them to air traffic controllers to facilitate greater collaboration between airlines and air navigation service providers.

This more holistic approach makes it easier for controllers to approve pilot requests for more optimal re-routing recommendations, reducing more fuel burn, more emissions, and more costs.

Airports, as key players in the air transport ecosystem, are starting to take a more direct role in reducing emissions through decreasing fossil fuel energy use associated with airside operations - the landing, take off, taxi, and turnaround cycles specifically typically the biggest part of an airport's local emissions (Scope 3 for airports, Scope 1 for airlines).

Like airlines, our latest SITA Air Transport IT Insights shows that nearly four out of five airports are investing in Business Intelligence solutions, with Airport Collaborative Decision Making (A-CDM) and flight operations being the top application areas.

A-CDM technology shares real-time data and insights among airport stakeholders such as ground handlers, airline partners, and air traffic management.

A-CDM is proven to minimise costly delays and disruptions, which increase carbon emissions. While it was an initiative first involving European airports, it is a practical emission-reduction opportunity this decade for airports worldwide, according to the industry-acclaimed Waypoint 2050 report.

We are seeing growing interest in developed and developing markets for A-CDM technology. El Dorado International Airport (BOG), for example, will become the first airport in Latin America to adopt A-CDM using our pioneering SITA Collaborative Decision-Making technology. We expect more will start to follow.

SITA is working with the industry to navigate the net-zero by 2050 journey. The technology we have today will not fully solve air transport's bigger sustainability challenge. But a real commitment to doing things differently and taking concrete steps today in decarbonizing operations will help build a more sustainable industry.

AIRVAN AFRICA

PATRICK: +27 (0)82 565 8864 BRENDAN: +27 (0)72 244 4958 PHIL: +27 (0)83 284 3898





*2006 Ikarus C42 1150 Hours TT Airframe 730 Hours TT 100 HP Rotax 912ULS Breathtaking Short Field Performance Good German Engineering **Price: Call For Price**



Ford GT40 If you love attention, drive a GT40

Price: For what have you Swap Value: R400 000



*Classic 1948 Cessna 170 Immaculate example with all records from new A genuine collector's item Price: R900 000

OTHER AIRCRAFT FOR SALE

2008 Whisper Motor Glider

* Maintained by the only Mooney Factory approved Maintenance and Repair Facility in Africa. Unless otherwise stated all prices are exclusive of VAT

+27 46 624 5332



1971 Beechcraft Baron E55 Stripping for Spares Call for Parts Price and Availability







Price: US\$ 245 000



*1964 Mooney M20C 3350 Hours TT Airframe, 1500 Hours SMOH Recent interior, good paint. The perfect budget A to B machine.

Price: R675 000



Lancair Evolution Turbine S/N 037 1250 Hours TT All Components Extended range fuel tank

Price: US\$ 930 000



1962 Cessna 182E 6900 Hours TT Airframe 1100 Hours SMOH Engine

Price: Call For Price

1942 Waco YMF 650 Hours TT Airframe | Only 15 Hours SMOH on Jacobs R-755B2M Radial Engine | Based in Australia Price: US\$ 275 000



www.airmoon.co.za

09

SOUTH AFRICA'S AILING **C130 BZ HERCULES** IN IN SUR

Bv Heidi Gibson

A decision by the South African Air Force to proceed with an earlier commitment to spend R1.6 billion on upgrading its existing – and very old – C-130 BZ Hercules fleet or to take up an offer by the United States Air Force to purchase their old C-130Hs is expected to be made shortly. Either way, the SAAF are going to have to dig into their pockets and spend money to maintain the country's ailing air force Hercules capability.

The USAF's offer to sell 12 of their old C-130H transport aircraft was made as part of the Excess Defence Articles or EDA programme and is ultimately aimed at assisting South Africa fight off the extremist Islamist militant's growing presence in neighbouring Mocambigue.

It is understood that a small South African Air Force technical evaluation team whose task was to assess the condition of the C-130H on offer flew to the US last year. This is a standard part of any Excess Defence Article and the same was followed in the late 1990s when the USAF donated two ex-USAF C-130Bs and three ex-USN C-130FS to the SAAF.

SA Defence and Military Minister Thandi Modise meanwhile told parliament in May last year that funding constraints were preventing the country from taking up the offer.

She said in parliament that the country will spend R1.6 billion upgrading its ageing C-130 BZ fleet.

The C-130J Super Hercules over Cape Town in 2010, photographed by the late Frans Dely. The 'J' is a regular visitor to the AAD exhibitions in South Africa.

Exactly how many of the nine remaining Hercules aircraft are in a good condition has not be verified but what is known is that in 2020 a C-130 BZ Hercules suffered a nose wheel collapse at AFB Waterkloof - this shortly after another Hercules ran off the runway in the DRC. It is known that the SAAF stripped out and dismantled this aircraft for the parts to be used amongst the remaining fleet.

The SAAF has considered three different options. The first was to spend no money, decline the purchase of second-hand aircraft from the USAF and not upgrade the current SAAF C-130BZ fleet - this would mean the end of the aircraft lifespan by 2024.

The second was also to decline the purchase offer but to upgrade the aircraft in SAAF 28 Squadron's inventory, returning to service "the rest of the fleet". The upgrade cost is for the five aircraft presently in service aircraft and one in long-term storage. This would enable the C-130BZs to remain airworthy until 2040.

The third option was to accept the purchase offer from the United States at an estimated R228 million per aircraft and simultaneously upgrade the current fleet of five aircraft for R1.6 billion. The secondhand C-130H models would then be able to serve until 2028 and the C-130BZs until 2040.

Needless to say, the SAAF has considered the second option while not completely shutting the door on the additional acquisition of aircraft.

Whatever happens, it is clear that the SAAF operates a decreasing fleet - the very first model, which is now 60 years old with the first aircraft delivered in January 1963.

Various modifications have been accomplished on the original SAAF aircraft, the most significant being:

Centre wing replacement and outer wing refurbishment from 1969 to 1972 done under the auspices of Lockheed Martin.



The SAAF operates a decreasing fleet of the very first model, which has been upgraded over the intervening years. The fleet is now 60 years old. This black-and-white photograph shows a Jet Assisted Take Off taken at Waterkloof airforce base, near Pretoria in July 1963.

- Engine upgrade from Allison T56-A-7 to T56-A-15 during the early 1970's.
- Basic avionic upgrade during the early 1980's.
- Total avionic upgrade under Project Ebb from the late 1990's.

The two ex-USAF C-130B's had already been modified with the fitment of H-model outer wings and a centre wing similar to that of the other SAAF aircraft.

The nine-strong fleet underwent a major refit from December 1996, when Marshall Aerospace of Cambridge in the UK and Denel was contracted to upgrade the aircraft as part of Project Ebb, fitting inter-alia digital avionics in the place of the electromechanical.

The upgrade was not without delay and infighting between Marshalls and Denel and ran at least three years over its expected date of completion, set for June 2002. The project was finalised in Julv 2009.

THE 500TH C-130J SUPER HERCULES

Meanwhile on a global level Hercules history was made last year with the announcement that Lockheed Martin had delivered its 500th C-130J Super Hercules airlifter.

This Super Hercules is a C-130J-30 aircraft assigned to the 130th Airlift Wing located at McLaughlin Air National Guard Base in Charleston, West Virginia.



The 130th Airlift Wing is a longtime C-130 operator that is currently modernising its legacy Hercules fleet with C-130Js.

The US government operates the largest C-130J Super Hercules fleet in the world and the delivery represents the US government's continued transition to the C-130J as the common platform across the country's air force, marine corps and the coast guard.

The C-130J Super Hercules is the current production model of the legendary C-130 Hercules aircraft.

The airlift choice has 26 operators in 22 nations and the global C-130 fleet has surpassed more than two million flight hours and holds more than 54 world records.

Defined by its versatility, there are 17 different mission configurations of the C-130J that includes transport (military and commercial), humanitarian aid delivery, aerial firefighting, natural disaster relief support, medevac, search and rescue, weather reconnaissance, and aerial refueling.

As the most advanced C-130 ever produced, the C-130J-30 Super Hercules (which is 15 feet/4.6 m longer than legacy C-130 models) offers these enhancements and advancements compared to legacy models:

- 30% more passengers and cargo
- 50% more CDS bundles
- 44% more paratroopers
- 30% crew reduction

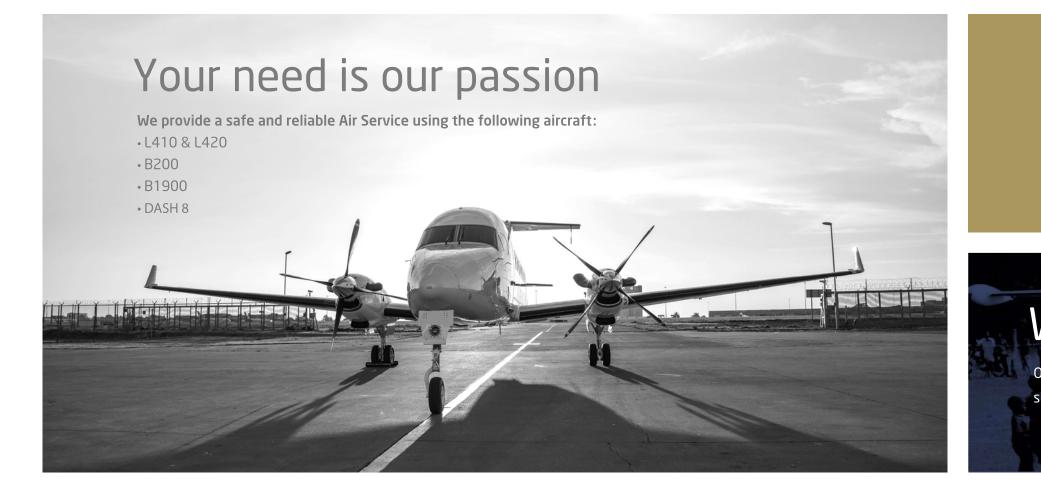
•

- 14% more fuel efficient
- 20% improvement in payload/range capability
- Integrated defensive suite and 250 knot ramp/door
- Automated maintenance fault reporting
- Unmatched situational awareness with digital avionics and dual HUD



The first South African Air Force (SAAF) C-130 Hercules aircraft ready to depart Dobbins air force base near Marietta, Georgia, in the United States 60 years ago. The venerable Hercules is still manufactured at Lockheed Martin's facility at Marietta.

Tunisia was the first African nation to acquire the newer 'J' Super Hercules model, that boasts overall improved performance over legacy models thanks to more powerful engines and the six-bladed propellors.





Safely

Reliably

- Comfortably
- Cost Effectively





Training

AIR-TEC has the only approved L410 - FNPT 2 Simulator in the Southern Hemisphere. Our Flight Training Team is able to customize and structure every course to our customer's specific requirements.





For more information on Air-Tec contact us on: +230 467 55 59 | sales@air-tecm.com | www.air-tecm.com **Head Office Address**: 111, Ebene Junction, Rue de la Démocratie, Ebene, Mauritius



We're on a Mission

Our Mission is to be the best at delivering where others can't by using our specialist expertise and investing in our committed & passionate team.

Our Core Business

• Aircraft Leasing ACMI

Aircraft Sales

Aircraft Maintenance, Factory Service CentresPilot & Engineer Training



MIDDLE EAST BUSINESS AVIATION BOOMS

Business aviation in the Middle East and Africa is growing - benefitting from a wave of first-time users and buyers in the region and coming on the back of the Covid-19 pandemic.

And the MEBAA event held in Dubai proved just that. It can only be described as a success.

The event welcomed over 10,000 attendees, 118 exhibitors and saw 16 aircraft on static display. There were attendees and exhibitors from 95 countries.

MEBAA Show 2022 was held under the patronage of Sheikh Ahmed bin Saeed Al Maktoum, president of the Dubai Civil Aviation Authority, chairman of Dubai Airports, chairman and chief executive of Emirates Airline and Group.

The event took place as the global private jet market is projected to reach (US) \$39.84 billion by 20251, from an estimated (US) \$25.87 billion in 2021, and the Middle East, specifically the GCC region, is representing a major part of that growth.

Most notably, the UAE has seen some of the strongest business jet activity.

According to insights from WINGX, the aviation research and consultancy company, business jet departures in the UAE from January to September 2022 were up 11% compared to the same period in 2021, and up 105% compared to 2022.

More recently, the Qatar World Cup led to heavy demand for private jets on Dubai to Doha match-day trips, and MEBAA exhibitor DC Aviation Al-Futtaim witnessed a 22% month-on-month increase in charter enquiries in the months leading up the event.

And analysts are saying this sharp rise of business aviation is a trend that will continue until this year.

Business jet operators in the Middle East and Africa plan to replace four percent of the installed fleet over the next five years according to the results from Honeywell Aerospace's 31st annual Global Business Aviation Outlook released last year.

Honeywell has predicted the business aviation market could see as many as 8,500 new jet deliveries worth (US) \$274 billion over the next decade.

It predicted 700 business jet deliveries in 2022 and a 17 percent increase in 2023, along with a 20 percent boost over 2022 billings. And, it seems, this increasing trend will continue through the next decade.

"I would say the most surprising thing was the 15 percent jump in the 10-year forecast, not just in terms of units, but also in terms of expenditures," said Javier Jimenez Serrano, strategy and market research manager at Honeywell Aerospace.

Each year the company surveys a pool of respondents that is representative of the world fleet in terms of where they operate and what type of aircraft, what size category, and also what type of operator, whether it is charter or VIP/corporate.

And Dassault Aviation international sales director Renaud Cloâtre, who is based in Dubai, has agreed.

"Growth potential is enormous because the region is underequipped. If you look at general aviation's structure in Europe or the US, there's clear growth potential in the Middle East. We are in an economy where the energy market is actually changing relations between Europe, the US, and the Middle East."

He said the Falcon 7X - of which Dassault sold six to Saudia Private Aviation - has been a tremendous success. "The 7X and 8X are fantastic aircraft, going all the way from here to continents. People in Saudi Arabia love three-engine aircraft. They love the



MEBAA - Announcing the establishment of the world's first Advanced Air Mobility centre and integrator were from left Tahnoon Saif, CEO of Mohammed Bin Rashid Aerospace Hub, Fethi Chebil, CEO and founder of VPorts and Walid Ibrahim Al Rahmani, assistant director general strategy & international affairs, UAE General Civil Aviation Authority (GCAA).



stability of fly-by-wire. The Saudi market is very complex, in terms of actors and operators. It's a big country, a big domestic market; it's distance they need.

Meanwhile in a major development at a press conference at MEBAA 2022, VPorts announced a partnership with UAE General Civil Aviation Authority (GCAA) and the Mohammed bin Rashid Aerospace Hub (MBRAH) at Dubai South to establish the world's first Advanced Air mobility centre.

These hybrid and all-electric eVTOL aircraft used as air taxi services, cargo deliveries and for other public-service applications will require a significant investment in ground infrastructure in the region.

According to Falcon COO, Raman Oberoi, Eve - owned by Brazilian aircraft manufacturer Embraer – has already approached Falcon with the proposal to launch services in the Gulf region.

Abu Dhabi-based Falcon is already planning to operate the eVTOLs initially from its existing heliport at Atlantis the Palm, offering tourists a bird's-eye view of Dubai. Airport Shuttle The Eve aircraft also has the potential to appeal to travellers moving to and from the VIP terminal at Dubai Al Maktoum International Airport.

In October, China's Xpeng chose Dubai as the site for the international debut of its X2 "flying car," which is primarily intended for personal transportation by owner-pilots. While the X2 has no wheels and looks more like one of the commercial eVTOL designs, Xpeng is also working on a model called the X3 that is more car-like and has eight retractable propellers that might appeal to high-networth Emiratis.

Meanwhile, the UAE's neighbour. Saudi Arabia, also has ambitions to be a significant player in the AAM sector. In the most recent development, in October last year Saudi Arabian Airlines (Saudia) sign a deal with Lilium to acquire 100 of the company's seven- passenger Lilium Jet aircraft. The memorandum of understanding covers plans for the Saudi flag carrier to operate an eVTOL air-taxi network across the country. The airline will help Germany-based Lilium to secure local type certification for its aircraft, as well as operational approvals.

At the event, the addition of the BizAv Talks platform meant attendees could listen to a range of interesting talks, panel

MEBAA – For the first time the MEBAA event last year featured a Bizav Talks platform giving attendees the chance to hear and participate in a number of presentations and interesting discussions.

discussions and presentations under different themes that focused on digitalisation, block-chain, Al and crypto-based payments.

Robert Plhak, CEO of VOO, and Gernot Winter, CEO of AVINOC gave an interesting presentation on the readiness and adaptability in this quickly evolving technological landscape in today's marketplace, assessing the purchasing methods of tomorrow's customers and benefits to providing flexible payment methods.

Winter said, "It's not just about cryptocurrency, it's about tokenisation as a whole, and the real goal is to connect the real world - the business aviation world - with the crypto world."

He gave some examples of how tokenisation and blockchain technology can be used within the future of the aviation industry. not just through payment, but also loyalty programmes, aircraft ownership, security for airlines and airports, MRO solutions, ticketing, identity management and much more.

Co-founders of Odys Aviation, James Dorris and Axel Radermacher, also presented at BizAv Talks with their session on 'Assessing early adopters of the eVTOL revolutions', which focussed on how eVTOLs will provide a fast alternative to congested city travel and asses how businesses can win over and retain high-net-worth individuals

Under the theme of sustainability, the MEBAA Show worked with Air bp as the carbon offsetting sponsor for the show.

A spokesperson from the Airbp target neutral team said. "As the carbon offsetting sponsor for MEBAA Show 2022 Air bp will offset any remaining calculated carbon emissions via bp's carbon management business, bp target neutral. Emissions will be offset by purchasing and retiring offset credits from bp target neutral's offset portfolio. This offset credit purchase in turn will help compensate for the emissions associated with the event space, promotional materials (with the exception of travel or attendee overnight stays)." For a full look at what happened at the show please go to: https://www.mebaa.aero/

BOMBARDIER **BREAKS GROUND**

Bombardier will establish a new service centre at the Abu Dhabi International Airport and is the first full-service facility in the UAE.

The announcement was made in the run-up to the MEBAA 2022 show in Dubai late last year. The new OEM-operated service facility will add more than 100 aerospace jobs to the community and is expected to open in 2025.

The service centre will feature a large hangar, comprehensive parts depot and a complete suite of maintenance services including scheduled and unscheduled heavy maintenance, aircraft modifications, paint modification, aircraft on ground (AOG) capabilities, and aircraft parking services.

The new facility will also have the capacity to fit up to four Global 7500 aircraft - and will be able to service the Bombardier flagship of a new era, the Global 8000, when it enters into service in 2025. It will provide maintenance solutions in the region and for worldwide customers of the Learjet, Challenger and Global aircraft families.

"The Middle East is an important market for Bombardier with more than 150 aircraft, and we are pleased to be establishing a highly efficient facility in the UAE for our customers in the market - and for those visiting from around the world," said Éric Martel, president and CEO Bombardier.

"Abu Dhabi is a dynamic financial hub for business and commerce in the UAE, and this service facility will provide significant

COMLUX TO COMMENCE CONSTRUCTION

A Swiss headquartered business aviation services company Comlux has announced the ground-breaking of a hangar facility at the Mohammed **Bin Rashid Aerospace Hub (MBRAH) at** Dubai South.

The event was attended by CEO of Mohammed Bin Rashid Aerospace Hub Tahnoon Saif and executive chairman, CEO of Comlux Richard Gaona.

The future facility will span 12,000 m² including a 5,000 m² hangar, and hosting an adjacent building spanning 2,250 m² across three floors. The hangar will accommodate two ACJ or BBJ family aircraft types simultaneously and including the future ACJ TwoTwenty, which will enter into service with Comlux Aviation soon.

Technical shops will also be established on the ground floor of the adjacent building. As well as a new design showroom for the ACJ TwoTwenty, the two additional floors will also be dedicated to commercial and management offices, lounges, and meeting rooms to welcome Comlux customers.

The ultra-modern facility will be fully equipped with solar panels allowing it to produce 100% of the electricity required by the company's activities. By the end of 2023, the hangar will be



Bombardier will open a full-service centre at the Abu Dhabi international airport in 2025

benefits, quick aircraft turnarounds, and OEM peace of mind to our growing customer base. We are also thrilled to be providing new, high-paying aerospace jobs in the community."

"Abu Dhabi Airports is pleased to welcome Bombardier to Abu Dhabi and the UAE, home to its first full-service facility in the UAE.

We have no doubt that Bombardier's global aviation leadership, experience, and expertise will be a catalyst for invaluable service delivery and excellence, upon the facility's official unveiling," said Jamal Salem Al Dhaheri, managing director and chief executive officer Abu Dhabi Airports.



Business aviation services company Comlux will build a hangar facility at the Mohammed Bin Rashid Aerospace Hub at Dubai South.

completely operational, allowing Comlux to provide its Middle East customers with line maintenance, AOG, and parking rental services.

"We are pleased to attend the ground breaking of Comlux's new facility, which will present an added value for VIP clients across the region and the overall business aviation sector. At Dubai South, our mandate is to foster our wise leadership's vision of making the emirate becoming a leading global aviation hub. We will spare no effort in attracting top companies towards that end by supporting companies, such as Comlux, with their needs to complete and operate the new facility," said Saif.

"I am extremely grateful to MBRAH's team for providing us with the ideal location and all the support required to launch the construction of our new facility at Dubai South. Next year, Comlux will have been in operation for 20 years; this project is another milestone in the development of Comlux worldwide, and Dubai is the ideal location to serve our Middle East and Africa customers." said Gaona.



By Heidi Gibson

Flying is just not enough anymore. Now pilots have adopted new skills and are turning their vocation into a portfolio of different and related competencies. London-based executive recruitment and leadership assessment professional Arpad Szakal – also a former aviation lawyer – spoke to World Airnews about this new trend.

WAN: Thank you for agreeing to be featured in our magazine. It is no secret that Covid grounded fleets and resulted in massive layoffs of pilots as well as other related aviation personnel. However, in this current climate, Covid is no longer a driving force of scale, other greater geo-political factors are at play including the war in Ukraine. Can you describe the current climate in which pilots find themselves and the world of aviation?

AS: The aviation sector has been one of the most significantly impacted sectors during the pandemic. Many aviation businesses are still having to work in survival mode. An already difficult and stressful situation has been heightened with many pilots living in fear of redundancy and furlough as well as many who have already had to confront this. The uncertain geopolitical situation in Europe, the war in Ukraine in particular, has created a lot of additional uncertainty. Over the past 12 months, a large proportion of hiring demand came from Europe and North America with US carriers being especially busy with their pilot recruitment. Significant pent-up demand for travel during extended lockdowns around the world has left the industry playing catch-up in a way we've not seen before. The moment borders opened up in Europe and in the US,

demand for pilot talent sprang back.

WAN: We know that Covid forced pilots to reinvent themselves and turn themselves into other roles. What did it force them to confront? How did it impact the relationship between the employer (airline) and pilot?

AS: Many pilots lost jobs, taken large pay cuts, reduced their flying time and even been demoted in rank, all to keep flying. As a result, it meant many of them were forced to relook and reinvent themselves.

So they discovered that many of the skills they developed during their career as a pilot can be highly transferable. Many of them started side hustles and side projects while being grounded. I have spoken to a lot of pilots around the world who decided to reskill themselves, such as project management. Upskilling has provided them with the opportunity to apply their existing skills they gained being a pilot into other roles in different industries ranging from shipping, logistics and other forms of transportation.

WAN: This current climate is very different - so how is this impacting the career of pilots?

AS: The trust between pilots and airlines has been broken. Flight crews returned to flying full-time when they were offered the opportunity - kept their side projects alive. Many of them realised that being a "pilot only" may not be satisfactory going forward.

Many crew (both flight and cabin) used their time during Covid when they were on the ground - to learn new skills and gain practical on-the-job experience through consulting and freelancing. Airlines are also making a significant investment to keep their employees' skills up-to-date.

WAN: You and I have spoken about pilots adopting or developing a portfolio career. Where did you first come across this term? What does it mean?

AS: A portfolio career involves monetising your skills in many ways and having multiple income sources, rather than a single job at one company. In the past this type of career was mostly dominated by senior executives, with former CEOs sitting on various boards, writing books or making speeches. Nowadays a portfolio career is available to almost anybody with skills that are in demand including commercial pilots.

With industries being re-invented everywhere, portfolio careers actually give professionals much better financial security. If you lose one client you may be slightly worse off, but you haven't lost your entire income. Contrast that with the individual who loses their main gig and entire income, unsure of when they'll ever start earning again. By not putting all of your eggs in one basket as a pilot, you're safeguarding yourself against the major financial risk that losing your main gig can bring.

The reasons for considering a portfolio career as a commercial pilot are many. Some do it for the variety and use of multiple skill sets. Some do it for autonomy so that they - rather than some corporate employer - control their fate. Some do it to gain freedom from corporate agendas and politics. Some do it to follow multiple passions or for personal growth and fulfilment.

WAN: Can you provide some examples of a pilot's portfolio career? Have you in your professional life assisted any pilots in creating this new career path? Can you give our readers an example of this?

AS: During the pandemic, I saw pilots move into project and programme management. Some set up their consulting businesses advising on all things safety, and operations related. Some volunteered their time to charitable organisations to gain some practical leadership experience.

A portfolio career could be a more diverse combination of parttime and project work, offering a mix of functional and industry expertise. Many pilots with full-time flying roles also have a 'side hustle' going on, which is effectively dipping their toes into building a portfolio career.

Examples of portfolio work include things like maths tutor, public speaker, start-up advisor, website builder, SEO practitioner, industry expert, content writer, consultant, and interim manager.



WHO IS ARPAD SZAKAL?

Arpad is an Executive Search & Leadership Assessment professional and a former aviation lawyer. He is an experienced consultant with specialised expertise in aviation & aerospace and the broader transportation markets. He works with boards. CEOs and investors on a variety of C-Suite appointments for a range of publicly traded companies, as well as for private equity-backed portfolio companies. Arpad has a strong international focus, often supporting clients in emerging economies who wish to access the global executive talent pool. Before his career in search & assessment, Arpad worked at the Aviation Departments of two leading international law firms in London where he handled EU regulatory cases including passenger rights.

Unlike an undifferentiated 'gig economy worker', a portfolio career is thoughtfully put together. It is focused on offering differentiated services to maximise earnings, and just like an investment portfolio, is always evolving based on where the returns on your time look to be the most promising.

WAN; How would you advise a pilot to get started in developing a portfolio career?

AS: The single most important element to define before starting a portfolio career is what you are going to do. What product or service will you provide? This does not necessarily need to be the same thing you have been doing in your main gig or something that you currently do as a side hustle.

Launching a portfolio career is a good opportunity to refocus. The important thing is that it has the potential to make you enough money and satisfy your career and lifestyle aspirations.

Your potential customers will assess the quality, value and distinctiveness of your work based on visual clues. In the past, you could do this with fancy suits, business cards, club memberships and offices. Now you need to project your professionalism digitally.

You need to stand out. What unique words, phrases, images, videos, logos, etc will newcomers notice about you? How do you explain your underlying motivation? What evidence will you use to reinforce your claims of expertise?

And most importantly, have conversations with those who are already pursuing a successful portfolio career. That's the best way to learn.

WAN: What about the potential conflicts about contracts? Would certain airlines restrict pilots from taking on/engaging in other incomegenerating schemes?

AS: If you are currently employed, check your employment contract. You need to have a thorough understanding of what is allowed and what is not.

WAN: What is your take about the barriers to entry for those who found themselves out of the loop and who want to come back? AS: By far the most popular reason that people don't fly is lack of money. Flying is expensive, and many become overwhelmed with the idea of spending so much money or just can't see how they'll pay for it all. But there are ways to fund flight training, including scholarships, loans and other various financing programmes.

Most flight students save as much money as they can before beginning, and fund the rest with a combination of financing and scholarships. Remember that scholarships don't fall into your lap; you'll have to search for them. The other reality is people simply don't know what opportunities exist. Talking to people in the industry can show you pathways to success you never knew were there. Mentorship is a large part of supporting others in the industry and many organisations and pilots love to do this.

WAN: Does this new trend affect a certain category of pilots or age group? Or is it across the board?

AS: This is definitely across the board.

WAN: Do you have any piece of advice for pilots wanting to engage and embrace this new path? Please elaborate.

AS: Combining skills and pursuing multiple career paths provides more security and is an effective way of staying agile. While this work style may seem unconventional to some, it will increasingly become the norm as more people discover the benefits of creating the career they deserve. After all, if you don't take ownership of your career, no one else will.

Remember: start small, plan long, but begin now.

WEST AFRICAN **AIRLINES SIGN**

By World Airnews correspondent Romuald Ngueyap

Two African countries - Congo and Côte d'Ivoire, signatories of the Single **African Air Transport Market (SAATM)** - have strengthened their air transport co-operation ties.

The signing took place at an event in Abidjan, Côte d'Ivoire, West Africa in November last year.

It was one of the 15 agreements concluded between the two nations at the end of the first session of the Great Joint Co-operation Commission of the Republic of Côte d'Ivoire and the Republic of Congo.

The agreements were signed by the Congolese minister of international co-operation and promotion of public-private partnership Denis Christel Sassou Nguesso and the Ivorian minister of foreign affairs, African integration, and diaspora side Kandia Camara

More comprehensive than other earlier agreements, this version includes several amendments to the Draft bilateral agreement signed on 12 December 2013 in Durban (South Africa).

This took place during the 6th International Civil Aviation Organisation (ICAO) Conference on Air Services Negotiations (ICAN 2013).

It takes into account "the modifications by the Yamoussoukro Decision, following the commitments made by the two countries for

NIGERIA AVIATION ACCIDENT INVESTIGATION BUREAU which is an authority in this field.

By World Airnews correspondent Romuald Ngueyap

Launched in 2007, the Nigeria **Accident Investigation Bureau** is undergoing a strategic transformation.

This comes after a law promulgated on 28 November 2022 by President Muhammed Buhari that saw its name changed to the National Safety Investigation Bureau (NSIB).

More than just a name change, its competencies have also expanded to include rail, road and maritime transport. According to NSIB Director General Akin Olateru, this transformation makes Nigeria the first African country to have such a multimodal transport accident investigation office. At this time, AIB-N began discussed to learn from the



Congolese minister of international co-operation and promotion of public-private partnership Denis Christel Sassou Nguesso and Ivorian minister of foreign affairs, African integration and diaspora side Kandia Camara have signed a co-operation agreement

the implementation of the immediate measures necessary for the establishment of the single air transport market in Africa".

Above all, it strengthens the 5th Freedom Rights between the designated airlines of the two countries.

Air Côte d'Ivoire currently flies the route between Brazzaville and Pointe Noire three times a week serviced by an Airbus A320.

The Congolese national carrier ECair also serves the Abidjan route until it ceased operations in 2016. Plans are for ECair to return to the air in March 2023.

experience of the Transportation Safety Board of Canada (TSB),

"The purpose of the NSIB is not to assign blame but to provide technically accurate, appropriate and timely information that can be used to implement measures. Aimed at preventing recurrence, and potentially mitigating the damage caused by such accidents," said Olateru.

Staff capacity-building will play a crucial role in the agency's new direction.

"Already, we have nearly 45 highly qualified investigators. We train them at Cranfield University (UK), and the Southern California Safety Institute (USA). We are also working with the NTSB."

It is this accumulated expertise that now makes it possible to investigate and make public the reports "within 18 months of the date of occurrence of the security event".

In the long term, the NSIB mainly seeks to domesticate training in the field. In 2023, the first African accident investigation training school in Africa is scheduled to be launched.

It is to be based in Abuja and is currently 95% complete.

GUEST COLUMN

ALMS GROUP

World Airnews has partnered with a **United Kingdom aviation insurance** company called The ALMS Group to bring you a specialised Question and Answer type quest column.

This means you get to have your insurance questions answered every month. It's a free service to all our readers - so get your fingers typing - you can ask away.

Hello everyone! A big hello to the readership of World Airnews, James O'Shea here, CEO of The ALMS Group Limited, an FCA regulated, UK brokerage, that will be celebrating our 25th year in business this March.



James O'Shea, CEO of The ALMS Group Limited

So how did this all start?

In conversation with editor Heidi Gibson, while at the Aviators Africa 2022 conference in Johannesburg a couple of months ago, the suggestion was thrown around. Long story short and here we are with our first column in this excellent publication.

Introducing





Robert Slaughter, a former chief Andy Pallett, 50 years' experience underwriter of Roval Re with Llovd's brokers in all aspects of insurance and re-insurance.



Betty O'Carroll, GDRP & data management

Marketing executive Georgina O'Shea

First an introduction. Who makes up the ALMS group and what do we do?

We are a UK brokerage, specialising in Aviation insurance & reinsurance and we are very familiar with the African Aviation Insurance market. ALMS Group is an agile group of people, complete with brains and beauty.

I am assuming that everyone knows how an aircraft insurance premium is calculated - a complicated equation of product, and differentials, sub-divisions, and summations - and after all that how can you even be sure that you are even insured!!!

In Africa last year it is reported that there were many fraudulent insurance policies issued in the aviation sector. While on the flip side in 2018 it was reported that insurance fraud has become a real scourge in South Africa. According to South African Insurance Association, 32% of the claims reported to insurance companies are fraudulent.



SO HOW CAN YOU "THE INSURED" **ENSURE THAT YOUR INSURANCE POLICY IS REAL?**

- 1. Ask your broker for a copy of their terms & conditions and read it carefully;
- 2. Check that the Broker is regulated and check with the regularity authorities that the registration is valid. That should ensure you are off to a good start! The ALMS Group are here to help and assist - and from herein - we will host a questions and answers column. So, send in whatever is on your mind and each month, we will sift out the more relevant issues BUT all your questions will be answered. Don't be shy!!

Please email all your insurance/reinsurance queries to: Georgina@ALMSGroup.co.uk with your insurance questions or queries.

UGANDAN **FISHERMAN** HAILED A HERO

By World Airnews correspondent Afeme Ronnie

A Ugandan fisherman has been acclaimed as a hero after risking his life to rescue passengers onboard Precision Airlines flight 494 when it crashed into Lake Victoria, near Tanzania last year.

Jackson Majaliwa relied on his rickety canoe to get him to the scene and through his quick thinking was able to assist in the rescue of about 29 passengers. Many were trapped inside as the plane began to submerge.

The incident occurred on November 6 last year. Precision Airlines flight 494 - registered 5H-PWF - was en route from Dar-es-salaam to Bukoba Airport.

Investigators are yet to establish the reasons for the accident. Survivor testimonies were that the pilot navigated a storm with heavy winds and overshot the runaway as a result of poor visibility. Without any search and rescue skills, Majaliwa opened the rear door using one of his oars this allowed passengers sitting in the back

of the aircraft to escape.

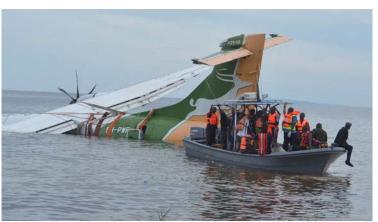
On board were passengers from Tanzania, Kenya, and China, including an infant, and four crew members. In total 19 people lost their lives. Those rescued were later rushed to a hospital at nearby Kagera.

investigation.

released.



NEWS



The ATR-42 aircraft that crashed into Lake Victoria



Investigators are still looking into the factors that caused this accident last vear

LIBYA AVIATION TAKES OFF

The Libya Aviation Forum and Expo the first aviation event of its kind in the Northern African country since 2009 - took place at the Corinthia Hotel in **Tripoli and organised by Hormuz Tours** and Event last year and was hailed as a major success.

Related aviation corporate companies from Denmark, Malta, Algeria, Tunisia, and Lithuania participated and government bodies such as the Ministry of Transport, the Libyan Civil Aviation and the Airport Authority were all in attendance.

Speakers from the private and public sectors participated in the lively discussion that highlighted the current status of the commercial aviation sector. Speakers from America and South Africa were also there. Suggestions for the further development of the sector and the progress achieved to date were made.

Sectors that were represented included commercial aviation, cargo forwarders, security companies, ground handling, training institutions, air ambulance and maintenance. The Libya Insurance Company, was a major sponsor, and was joined

by Chef Catering, Assadafa and Giga as a technical sponsor.

Preparations are already underway for a second event later this year. Organisers have earmarked November 6 - 8, 2023 for the second forum. For further information contact Adel Ben Elhaj at the following email address: info@aero.lv.



From left: Ayoub Ben Youshah (CEO-Assadafa Aviation) Suleiman Shanin (ambassador of Algeria to Libya) Adel Ben Elhaj (CEO-Hormuz Tours and Events (event organiser) Chahine Khiat (Star Aviation) Taha Labidi (Star Aviation)

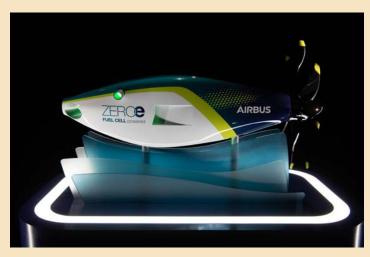


Steve Dutton Head of Strategy (MEDAVIA Co.)

A HYDROGEN-POWERED ZERO-**EMISSION ENGINE**

Airbus has revealed that it is developing a hydrogen-powered fuel cell engine.

The propulsion system is being considered as one of the potential solutions to equip its zero-emission aircraft that will enter service by 2035.



Airbus has released an image of what the ZEROe fuel cell engine would look like. Image courtesy AIRBUS

Airbus will start ground and flight testing this fuel cell engine architecture onboard its ZEROe demonstrator aircraft towards the middle of the decade.

The A380 MSN1 flight test aircraft for new hydrogen technologies is currently being modified to carry liquid hydrogen tanks and their associated distribution systems. Glenn Llewellyn, vice president Zero-Emission aircraft Airbus

"Fuel cells are a potential solution to help said. us achieve our zero-emission ambition and we are focused on developing and testing this technology to understand if it is feasible and viable for a 2035 entry-into-service of a zeroemission aircraft.

"At scale, and if the technology targets were achieved, fuel cell engines may be able to power a 100-passenger aircraft with a range of approximately 1,000 nautical miles. By continuing to invest in this technology we are giving ourselves additional options that will inform our decisions on the architecture of our future ZEROe aircraft, the development of which we intend to launch in the 2027-2028 timeframe."

Airbus identified hydrogen as one of the most promising alternatives to power a zero-emission aircraft, because it emits no carbon dioxide when generated from renewable energy, with water being its most significant by-products.

Airbus has been exploring the possibilities of fuel cell propulsion systems for aviation for some time. In October 2020, Airbus created Aerostack, a joint venture with ElringKlinger, a company with over 20 years of experience as both a fuel cell systems and component supplier.

In December 2020, Airbus presented its pod-concept which included six removable fuel cell propeller propulsion systems.

ADVANCED TRAINING EXCELLENCE SINCE

- Initial Type Ratings
- IF Revalidations (PPL, CPL and ATPL)
- Foreign License Validations
- ATPL Preparation & Test
- Glass Cockpit Training
- Pilot Proficiency Checks
- Multi-Crew Coordination Training
- TCAS 7.1 Training (Traffic Collision Avoidance)
- GPWS (Ground Proximity Warning System)
- PBN & RNAV / GNSS

SIMULATOR ENGINEERING AND MANUFACTURING SINCE 1995



www.simuflight.co.za AT0 nr: 1050



We are closing on the 15th of December 2022 and opening on the 3rd of January 2023. We wish all our loyal customers a blessed festive season and a prosperous 2023.

Specialising in: Boeing 737 NG | Beechcraft B1900 | King Air 200 | Cessna Caravan





OUR SENECA SIMULATOR IS NOW APPROVED FOR TCAS 7.1

In-house **Type Specific Simulators**

18 Suni Avenue, Corporate Park South, Midrand Tel: +27 11 314 0152 | sales@simuflight.co.za

UP FOR AUCTION: **ELVIS** PRESLEY'S PRIVATE JET

The famous King of Rock bought the Lockheed 1329 JetStar in 1976, a year before his death, and this month it will go under the hammer at auction house Mecum's upcoming Kissimmee auction on January 4 -15.

For decades, Lockheed's JetStar was the executive jet of choice for countless A-listers. Presley acquired it from OMNI Aircraft Sales on December 22, 1976 for the princely sum of (US) \$840,000.

Lockheed introduced the popular model in September 1957 - the same month RCA released Elvis' single "Jailhouse Rock."

The aircraft was extremely capable, boasting four engines that were contained in two pods mounted at the rear of the fuselage. They allowed for a max speed of around 565 MPH and a range of upwards of 2,500 miles, more than enough for active jetsetters



focused on taking care of business. Inside, there was ample room for eight to 10 passengers to ride in style along with an onboard crew of three (two pilots and one cabin attendant).

The dilapidated jet has been sitting at the Roswell Air Centre in

ell, New Mexico, for decades. Courtesy of Mecum Auctions

After two prototypes, an additional 202 JetStars were produced at Lockheed's Marietta, Georgia, facility in the United States.

When Elvis took ownership of this particular JetStar, registered with the FAA as N-20TF, the entertainer was no stranger to luxurious aviation acquisition. He had already amassed a modest fleet, which included a custom Convair 880 named the "Lisa Marie" that went by the call sign of Hound Dog 1, along with a second JetStar identified by its call sign of Hound Dog 2.

With a busy touring schedule, this aircraft was needed to transport the singer, his TCB band, and his entourage to venues, concerts, and appearances around the country.

Elvis kept several pilots on retainer that were ready to fly him to adoring fans at a moment's notice.

Two similar aircraft are currently on display at Graceland. Inside, the cabin features wood panelling and red velvet upholstery with gold-finish hardware. The plush chairs swivel and recline, along with a couch. An onboard entertainment system is tucked away in a media cabinet, featuring a television, RCA VCR player and audio cassette player, and headphone ports with audio controls located at every seat.

A galley contains storage and a meal-prep area complete with a Kenmore microwave and beverage dispenser. At the rear is a lavatory along with additional storage and cubby areas.

In the spring of 1977, the jet was sold, later ending up with a Saudi Arabian company. The JetStar was then moved to Roswell International Air Centre (ROW) in Roswell, New Mexico, where it's been stored for decades and resides to this day. It is a little worse for wear and will require disassembly to be shipped, and co-ordinating assistance is available.

Documentation joining the jet includes a copy of the Aircraft Security Agreement document signed by Elvis Presley, a copy of the Aircraft Bill of Sale and Official FAA Blue Ribbon documents. While the P&W engines and many cockpit components have been removed and no engines or replacement parts will be included with the sale of Elvis' jet, it serves as an incredible restoration opportunity and a chance to create a unique Elvis exhibit for all the world to enjoy.

FLYING **TAXIS** OF THE **FUTURE**

Some odd-looking aircraft are flying circles above strawberry and lettuce fields in rural California, as the next era in aviation draws closer.

Powered by electric batteries and designed to take off like a helicopter but fly like a plane, these new aircraft - undergoing testing - could soon be certified to whisk you to the airport or elsewhere.

They're called electric air taxis, or electric vertical take-off and land aircraft (eVTOLs) - and are essentially cleaner, quieter helicopters and are billed as the next big thing in transportation.

eVTOLs are expected to be cheaper to maintain than traditional helicopters because their electric motors have fewer moving parts.

Most eVTOL companies are targeting fares about equal to an Uber Black trip, which could make them a (relatively) affordable option.



Morgan Stanley projects the market will take off slowly, but will be worth (US) \$1 trillion by 2040 and (US) \$9 trillion by 2050. Investors have poured(US) \$6 billion into newly public eVTOL manufacturers, including Joby Aviation, Archer Aviation and others.

But after rising initially, most eVTOL stocks have fallen this year amid broader economic woes and timeline uncertainty. But executives at Joby and Archer remain confident and said their eVTOLs are moving out of the research and development phase and into early commercialisation.

Both expect to complete the Federal Aviation Administration (FAA) certification process by 2024 and to begin service in 2025.

At the Joby pilot plant at Marina Municipal Airport in Monterey County, California, workers were assembling the aircraft by hand. Many of the processes were laid out by Toyota, a Joby investor, to prepare for scaling up.

Joby is unique among eVTOL companies for its vertical integration - it has created many unique parts for its aircraft, rather than using proven, FAA-validated aviation components.

That's because the eVTOLs' transformational design requires fresh thinking, Joby executive chairman Paul Sciarra said.

"We're going to be building aircraft at volumes that will very soon exceed what are traditional aerospace volumes," he said. "So we had to start with production processes that we knew would scale." Archer is also prepping for wide-scale production.

The California-based company, which counts Stellantis and United Airlines as investors, recently announced plans to build a manufacturing facility in Covington, Georgia, near Covington Municipal Airport.

It's working on a facility capable of producing up to 650 aircraft per year.

Production of Midnight, its sleek air taxi, is slated to begin in the latter half of 2024.

Joby's first eVTOL service to market, will target New York and Los Angeles. Photo courtesy of Joby



LAST BOEING 747 LEAVES

By Bryan Corliss

The final Boeing 747, line No. 1,574, rolls out of Boeing's Everett factory. The plane was built for Atlas Air, which is scheduled to take delivery in early 2023 - almost 52 years after the first 747 entered service with Pan Am in January 1970.

"It's kind of a sad occasion," said Jon Sutter, the grandson of legendary Boeing aircraft designer Joe Sutter, the father of the 747. Jon Sutter - who now works at Boeing in the same Boeing Field building where his grandfather designed the Queen of the Skies hadn't been born when the first 747 flew.

And his grandfather, who passed away in 2016, didn't live to see the end of the programme he's most closely associated with.

However, even with the end of the 747 programme, Joe Sutter's legacy lives on, his grandson said.

"His baby, Boeing, is still going," Jon Sutter said. "You can see his influence in every other plane out there."

WAITING FOR A BREAK IN THE CLOUDS

The morning of the first flight - Feb. 9. 1969 - was cold and grev in Everett, Heavy clouds pressed down. Along the runway, snow that had fallen a few days before had melted into a frigid slush that soaked the feet of thousands of people who had come to watch: VIPs, school children, scores of airline customers, and long ranks of "The Incredibles" - Boeing stalwarts who had built the world's largest airplane and world's largest factory almost simultaneously.

There were a fair number of people who didn't believe the 367ton behemoth would fly. Legendary Boeing designer Joe Sutter, had said in a 2004 interview with the Everett Herald, that his wife

had been stopped by people at the grocery store who questioned whether her husband had lost his mind.

Jon Sutter said his grandfather had brought his grandmother that morning to the spot alongside the Paine Field runway where his team had calculated the giant "Spirit of Everett" would leave the ground - 4,200 feet down.

Take off was delayed for a while. Co-pilot Brian Wygle said they were waiting for a break in the clouds because they didn't want to take off for the first time on instruments. As pilot Jack Waddell started the massive jet rolling down the runway, observers said it seemed to move slowly, even though the records show it was going 184 mph when it lifted off.

"It must have taken a half-hour till it got to the point where it rotated and took off," John Monroe, a junior Boeing engineer who would eventually become a lead economic development recruiter for Snohomish County, also told the Herald in 2004.

Waddell climbed up to 15,500 feet. He handed over the controls to Wygle, who said they both were pleasantly surprised with how easily the 747 handled in the air. Back on the ground, Waddell would later say it was a "two-finger airplane," meaning he could fly it with only his forefinger and thumb on the controls.

The two pilots flew the plane for 110 minutes before landing. Joe Sutter later admitted he was apprehensive about landing the big bird, but it "sort of eased into the ground,"

"When I watched the first landing," he told the Herald, "that's when I knew we had a good airplane."

Sutter told the Herald that after the plane landed, he slipped away from the VIP area to find his wife. She was crying, he said. "I had to give her a hug."

747 WAS BOEING'S PLAN B

Many of the people who saw the first flight shed tears of relief. A lot was riding on the first flight. Boeing had literally bet the company on the 747, which had been kind of a Plan B.

Boeing had intended for the Supersonic Transport (for which the late, great Seattle Supersonics basketball team was named) to be its cutting-edge passenger jet for the second half of the 20th century.

It had drawn up the 747 as a long-haul cargo jet - its fuselage dimensions were determined by the amount of space needed to fit two rows of 20-foot cargo containers side by side. The cockpit was raised - creating the 'Four-Seven's iconic profile - mainly to get it up above the cargo hold.

Likewise, Everett was not Boeing's first choice to be the home of the 747 programme, according to TM Sell, a professor of political economy at Highline College and an author of a book, "Wings of Power" that looked at how the company wielded influence in its home state during the 20th century.

There was no room to assemble a jumbo jet at Boeing's Renton plant, or at Plant 2 in Seattle, where it had built bombers during World War II.

The new plane was more than twice the size of the 707, and it would require a new building.

Boeing's site-selection team originally came back with recommendations for putting the new programme in Cleveland, Denver, or San Diego. Moses Lake, Wash., was another strong contender. Boeing went as far as to take an option on land near Walnut Creek, Calif., in today's Silicon Valley.

But in the end, top Boeing management worried it couldn't get enough key personnel to relocate and decided it didn't want to trust its make-or-break airplane programme to an inexperienced team of engineers, techs, and mechanics. Paine Field, which had been well down the list of potential sites, was the final pick.

LAST 747S HONOUR JOE SUTTER

While Jon Sutter wasn't yet born in 1969, he said his sister was 3 months old, and their grandfather pulled some strings so she could be brought into the factory to see the first 747 before it flew. Boeing designer Joe Sutter and the plane he's best known for, the 747. Despite his fame in the industry, his grandson says he was a "pretty standard grandpa."

But for all his notoriety in the aviation world, Joe Sutter was "pretty much a standard grandfather," his grandson said.



Boeing designer Joe Sutter and the plane he's best known for, the 747. Despite his fame in the industry, his grandson says he was a "pretty standard grandpa".



Sutter with a commemorative model 747 presented to him in 2011, when Boeing named an Everett engineering building in his honour./Seattle West photo

With one exception: When the family spent weekends at their beach cabin out on Hood Canal, sometimes some of grandpa's work friends - CEOs of various airlines - would come to join them for cocktails and oysters grilled on the half-shell over a fire.

"That was part of our life," Jon Sutter said.

Family members are sad to see their grandfather's airplane program coming to an end, and some think it's a strategic mistake, he said. With all of the problems Boeing's had with the 737, 777, and 787 programmes, the 747 has been a reliable performer.

"They're shutting down lines on the airplane they can deliver." The plane will be one of three to bear a '60s-style cartoon drawing of Joe Sutter and a 747 on its tail. Cargolux and UPS already are flying the other two "Joe Sutter Editions."

Today's factory roll-out isn't the last step. The plane will be towed across Washington State Route 526 to the flight line, for field testing and work to correct any squawks before flight testing. Atlas will "take the keys" in a delivery ceremony sometime in early next year. (Jet aircraft don't need keys to turn on the ignition: Boeing typically provides customers with ceremonial keys to lock and unlock cockpit doors at delivery ceremonies.)

THE 747 SURVIVED THE BOEING BUST

Jon Sutter said that his grandfather would also be able to take pride in the success that was well beyond what anyone ever expected. The Queen of the Skies was supposed to be Boeing's 2707, the Supersonic Transport, not the 747.

The 234-seat, delta-winged SST was intended as America's answer to the European Concorde.

The FAA itself picked the design over proposals from Lockheed and North America in 1966, and by 1971, the programme had 122 orders from 26 airlines, including Alitalia, Canadian Pacific, Delta, Iberia, KLM, Northwest, and World Airways,

But the programme, which was two years' behind schedule by then, was reliant on federal funding, and in 1971, Congress cancelled that cash stream, citing environmental concerns (including noise) and marginal economics.

Already teetering due to cuts to military contracts as the Vietnam War wound down, lost NASA contracts as the Apollo programme ended, and a drop in commercial orders during a recession, the end of federal funding for the SST was catastrophic for Boeing, leading to the layoff of two-thirds of its workforce, some 60,000 people.

The 747 has been remarkably successful as a cargo jet, as projected, but its impact on passengers was greater. The huge wings needed to lift the heavy jet could carry enough fuel to cross oceans, and packing the cargo holds with people instead of pallets dropped seat-mile costs by some 30%. For the first time, trans-Atlantic and trans-Pacific travel was within the reach of the global middle class.

HARD TO IMAGINE THE WORLD WITHOUT IT

"You think of everything that airplane has done. It's carried the space shuttle, It's airlifted a thousand refugees at a time," Jon Sutter said, adding that 747s have been outfitted for fire-fighting, carried airborne lasers and telescopes, and - since 1986 - have carried US presidents.

"It's actually hard to imagine the world without it," Jon Sutter said. "There's not much out there that can replace it." Boeing isn't planning to replace the 747 any time soon. In the company's recent briefing on its air cargo market projections, vice president of commercial marketing Darren Hulst said Boeing expects the 747-8Fs will fly "well into the middle of this century."

Boeing expects cargo carriers will focus on 777 freighters and conversions, which have higher payload capabilities than older model 747-400s, Hulst said.

Boeing will provide aftermarket support for the 747s as long as they are flying, and when those days are done, "then we'll see what happens beyond that," Hulst said. "But it's a long time away."

747-8 WAS THE FINAL VERSION

The 747 has been refurbished eight times. The last iteration, the 747-8, was built to take advantage of new engines and avionics developed for the 787. The greater thrust would allow for a 19foot stretch of the fuselage - the only time Sutter's original design was made longer. (The 747 SP was developed in the 1970s as an extended-range passenger jet; it was 48 feet shorter. Forty-five of them were built.)

The 747-8 programme was launched in 2004, and Boeing executives at the time expected it to be an easy refit, and forecast a market for 300 planes, split between passenger and cargo versions. However, the myriad delays on the 787 programme siphoned engineering talent away from the Dash 8. Production didn't begin until August 2008, and in February 2009, then-CEO Jim McNerney said the company was re-assessing whether to continue with the programme, particularly because it had only won one order for passenger planes.

Like Airbus, which struggled to find buyers for its A380 passenger plane, Boeing found that airlines weren't interested in planes with more than 400 hard-to-fill seats. Boeing's 777s and 787s and Airbus' A330s and A350s had similar ranges to the 747 and A380, which allowed them to serve similar city pairs with more frequency.

Boeing ended up pushing back the programme another year - taking a billion-dollar charge against earnings in the process. But early customers Cargolux and Lufthansa reaffirmed their commitments, and Korean Air placed an order for five passenger models. (KAL would later add two cargo jets to the order.)

In February 2010, the first 747-8 flew. Cargolux took the first of its planes in 2011; Lufthansa took its first passenger model in 2012. Boeing sold 155 Dash 8s; with freighters outselling cargo jets roughly 2-to-1.

UPS ended up being the biggest buyer of 747-8s, with 28 cargo jets. Atlas Air, Cargolux, and Cathay Pacific each took 14 for their cargo fleets.

Lufthansa operates the biggest 747-8 passenger fleet, with 19; KAL has 10, plus seven cargo versions.

SUTTER'S LONG LEGACY

While the plane most associated with his grandfather was the 747, Joe Sutter also was a senior member of the team that designed the 737, which is the airplane that set the standard for aerospace design for more than half-century.

With its conventional tail, underslung wing and engines mounted in pods, Jon Sutter said, "that basic 'Three-Seven configuration is the cookie cutter for every plane that's come after." Joe Sutter believed in the 737 even when sales were so poor that management



CO² EMISSION CALCULATOR

As all sectors of the aviation and travel industries come together in pursuit of net zero CO² goals, this new and major collaboration effort will bring even greater transparency, accuracy and consistency to how a traveller's carbon footprint is calculated.

Travalyst and IATA both possess a deep understanding of the traveller as well as relevant technical and operational expertise, which will enable the two organisations to collaborate closely to align CO² emission calculations.

This collaboration will focus on both data and standard methodology for route-based passenger CO² emissions calculations for aviation at scale. This will include a shared position on how to account for sustainable aviation fuel. "Consumers want to understand the environmental impact of their travels. Both Travalyst and IATA are continuously working to improve their methodologies by incorporating emerging knowledge of climate impacts. So we are working together to provide the consumer with easy access to consistent calculations of the environmental cost of their travel," said Willie Walsh, IATA director general.

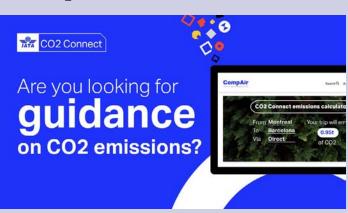
Sally Davey, CEO Travalyst said, "This is the first time that airlines and the travel technology sector have come together in

considered selling the entire programme to Japanese interests. At 54 years old, the 737 already has outlived the Queen of the Skies.

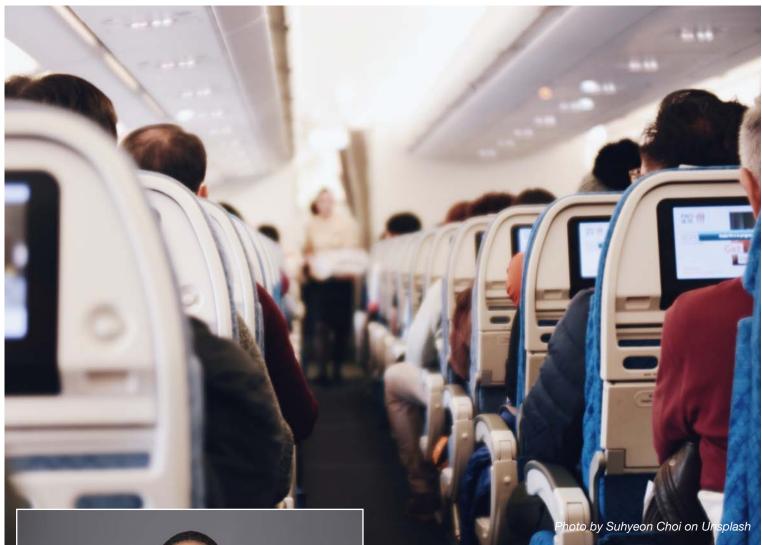
Jon Sutter said his grandfather was one of the greats who defined what Boeing was and what the industry could be, listing him alongside Ed Wells (who designed the B-17 and 707) and Malcolm Stamper (Sutter's boss on the 747 programme, who would go on to be Boeing's longest-serving president).

"You really can take it down to just a few engineers at Boeing," Jon Sutter said, "and he was part of that group."

The International Air Transport Association (IATA) and Travalyst, have joined forces with the aim of providing consumers with a consistent, accurate and widely available calculation of their carbon footprint from air travel.



this way. As such it is a milestone moment in the decarbonisation of the sector. In the face of the climate emergency, travellers want and need clear and unequivocal information about their carbon footprint on which to base travel decisions. Today we are bringing some of the leading travel brands around the table with the world's leading airline association, with the aim of easily providing consumers with the most accurate carbon calculations."





Director of the South African Civil Aviation Authority - the highest body of aviation in the country - Poppy Khoza made international headlines last year when she was elected as the first female president to preside over the 41st assembly of the International Civil Aviation Organisation or ICAO. The significance of this appointment brought accolades to the country's aviation sector and beyond.

AN AFRICAN AVIATION CHAMPION

By Heidi Gibson

Director of the South African Civil Aviation Authority – the highest body of aviation in the country - Poppy Khoza made international headlines last year when she was elected as the first female president to preside over the 41st assembly of the International **Civil Aviation Organisation or ICAO.** The significance of this appointment brought accolades to the country's aviation sector and beyond.



Airline Restructuring | Technical & Operations | Training | Safety Finance | Commercial | Aviation Policy | Master Plans



- Cost effective consulting services;
- High quality deliverables;
- Contribution to improve air transport sustainability in Africa.

Contacts us

African Airlines Association (AFRAA) P O Box 20116 Nairobi 00200 - Kenya Email: consulting@afraa.org Tel:+254 20 23 20 144 / 23 20 148 Office Mobile: +254 722 209708, Website: www.afraa.org







• Tailored solutions from experts who understand the African context;

World Airnews finally caught up with Poppy Khoza and had a chance to put some questions to her about her achievements.

WAN: Congratulations on being elected the first female president of the International Civil Aviation Organisation (ICAO) Assembly. There must have been some kind of lobbying going on in the background - did you have any inkling that this was going to happen? Or was it a complete surprise?

PK: Initially I had no idea that a number of states were lobbying for me to be nominated for this responsibility. However, as the Assembly came closer, the countries raising my name had to find out if I was prepared to take on this huge responsibility. So, to answer your question, eventually a candidate does become aware of the intention of any country to raise their name for a role at the Assembly. I must say that I was in doubt at first but then I remembered that I actually was appointed as one of the vice presidents in the previous Assembly in 2019. I had also served over four terms in the Aviation security panel, two of them as vice chairperson and then the next two as chairperson. Last October, I was nominated by the USA and supported by all States to chair the facilitation stream of the highlevel conference on Covid.

In the plenary meeting on the first morning of the 41st session, my name was then put forward by the Czech Republic (Czechia) on behalf of the EU Member States and was unanimously supported by the rest of the 193 ICAO Member States. It was election by proclamation.

It was a massive honour for me and for South Africa to preside over this critical Assembly, themed "Reconnecting the World". It was the first one held, post the pandemic period, that has created so much socio-economic instability within the aviation sector. It also speaks volumes about South Africa's importance at global aviation discussions, and the respect that the country's voice receives in the sector globally. I must emphasise that South Africa is held in high regard, and this is something worth noting and celebrating. In as much as I was honored with this difficult task considering the matters that were before the Assembly, it was clear that it would be a difficult and challenging task.

WAN: Can you explain to our readers - how the ICAO assembly works, and this election all came about?

PK: ICAO is a specialised agency of the United Nations tasked with the responsibility to co-ordinate matters of international civil aviation globally. It is funded by 193 Member States to support their diplomacy and co-operation in air transport as signatory states to the Chicago Convention (1944). It sets standards for aviation safety, security, efficiency and regularity and environmental protection.

It is governed by the Council which is a permanent body of the Organisation responsible to the Assembly. The Council is elected by the Assembly for a three-year term and is comprised of 36 member States and it is led by the President of the Council. In terms of day to day running of the organization, the Secretary-General is responsible for the administration supported by full-time employed ICAO staff.

All Member States of the ICAO convene once every three years to, among other responsibilities:

- Elect the Member States to be represented on the Council.
- Review in detail the work of the Council and Organisation in the technical, administrative, economic, legal, and technical cooperation fields, approve amendments to the Convention on International Civil Aviation (Chicago, 1944) that are subject to ratification by Member States.
- Set the worldwide policy direction and approve the budget for the next three years.

At the Assembly, a President is elected to preside over the entire Assembly for the duration of two weeks. Any member State can nominate any candidate based on their competence to chair the plenary at the Assembly. The chairmanship is not based on rotation nor is about "no country left behind" but the capability of a person who is to preside over the Assembly.

The President chairs the main plenary and the Executive committee. Among the discussion points in the Executive Committee include, environmental matters, aviation security, policy-related matters including convention related issues, technical co-operation and assistance, capacity building, audit programmes, air transport facilitation etc.

WAN: Now the hard work begins. What will the role entail? What will be your duties and does this mean that you may have to step down from your position as DG of SACAA?

PK: I was chosen to preside over the 41st ICAO Assembly for a specified period commencing from 27 September to 7 October 2022 to ensure that the Assembly reaches the outcomes setting the strategic agenda for the next triennium.

I remain a part of the South African Civil Aviation Authority and will continue to support and play an integral role at ICAO structures from time to time and as the need arises. This year's Assembly reviewed more than 580 working papers of aviation interest. The most critical areas were on environmental protection, where the Assembly for the first time adopted the long-term aspirational goal (LTAG) for carbon reduction to achieve Net Zero aviation emissions by 2050. The Assembly also endorsed the Global Aviation Safety Plan and Global Air Navigation Plan in the areas of aviation safety and air navigation capacity and efficiency. Also, the Assembly agreed to include cyber resilience as a key priority in the review of global plans. Gender equality issues were also part of the agenda encouraging member states and the industry to prioritise gender equity in civil aviation globally.

There were also discussions on the facilitation of health, security, innovation as well as safety and air navigation, where highlights included the importance of safety management systems, increased safety oversight where needed.

WAN: What does your appointment mean to you as a woman and to South Africa and African aviation?

PK: It is a massive honour to be the first-ever woman to fill this role in the ICAO Assembly's 78 years of existence. The status quo was challenged, and I must commend the member states who looked beyond gender issues when electing me as the first woman President of the Assembly from the African Continent.

Seventy-eight years is a long time, seven decades of women being overlooked by the system. But then again, as women voices become more prominent, it is becoming very difficult to ignore them and it takes progressive minds to recognise that women are equally competent and capable to take the lead in very influential global structures which shape the global agenda. It is not a small feat and I remain humbled every day by this recognition because it does not come by every day and there are many other women who are equally capable and competent to lead such complex discussions.

If anything, I hope that this achievement also inspires women in the aviation sector, knowing that I also have a role to play in mentoring and coaching other women to challenge the status quo and be fully empowered in our industry.

I strongly believe that the African continent does have an opportunity to change the landscape and the narrative on matters pertaining to gender inequality in the sector. I challenge the continent and the South African aviation industry to lead this process, change the narrative and to drive the ICAO's Gender Equality Programme Promoting the Participation of Women in the Aviation Sector for the rest of the world to follow. Our continent, like the rest of the world, is still lagging in the promotion of women and women leaders in the sector. I am inspired when I see the work done and the direction taken by my fellow chief executives in aviation,



Mpumi Mpofu at Airports Company South Africa, and Nozipho Mdawe at Air Traffic Navigation Systems and many others such as Carla da Silva at Airlink, Khangi Khoza at Swissport and many more.

WAN: What gualities and values have you as DG brought to the SACAA and how have you to implemented them in the institution to get it right - seven clean audits and an average of 87.3% for aviation safety is no mean feat?

PK: Let me correct you: it is nine clean audits from the last 10 years. It is always important for any leader to entrench good governance and to elevate organisational performance in accordance with the prescripts of law, mandates and key priorities set out by governance structures including the Board of Directors and the Minister of Transport who is the Executive Authority. Not only do we comply with governance we also need to ensure compliance with the provisions of the Civil Aviation Act which prescribes the mandate of the SACAA.

We are elated with these accomplishments over the years, but good organisational performance is not a once-off and we continuously look at improving our services. One case in point is the improved client services consistent with the Year of Client Centricity where on 1 November 2022 we showcased our new Client Contact Centre, the new web-based e-Services and our new website.

We are continuously improving to make it easier for our clients to transact with the SACAA by cutting down red tape by reviewing the way we do business which ultimately must benefit the end user.

We are on a journey towards fully automating all processes that can be done online and only those that will require our physical presence will remain.

Processes like license applications, renewals, examination bookings, online payments etc., can now be done online by our clients. We will continue to improve our client services as we implement more automated solutions. Be on the lookout as we announce further online services.

WAN: Did South Africa get re-elected to the 36-country Governing Council?

PK: South Africa was re-elected and our role in the Governing Council remains uninterrupted since 2003.

It is also an exciting period for African Aviation as Nigeria and Egypt were elected alongside South Africa for Part II of the Council

(States which make the largest contribution to the provision of facilities for international civil air navigation). Let's also congratulate Equatorial Guinea, Ghana, Ethiopia, and Zimbabwe who were elected to Part III of the Council, as States ensuring geographic representation. This will enhance the socio-economic benefits for the continent in line with our Single African Air Transport Market (SAATM) that will facilitate greater air transport trade on the continent.

WAN: Do you have any inspirational message for aspiring women pilots, engineers or even cabin crew?

PK: As women in the industry, we need to stand together in promoting gender awareness, to develop, nurture and empower ourselves. Civil aviation is a big complex system that requires multiple skills and I encourage all those aspiring to enter this industry to know that there is more to civil aviation than the skills that are usually spoken about. We need environment specialists, cyber security professionals, aviation medicine doctors, business administrators, aviation law professionals, women leaders who will provide leadership and grow the industry and above all competent professionals who want to make a difference irrespective of their race, gender, and creed.

The aviation landscape has shifted, and it requires new and progressive thinking given the volatile situation we find ourselves in, from the pandemic to geopolitical issues and uncertainties that lie ahead. One thing certain is that civil aviation is an enabler of socioeconomic progress and supports many sectors of the economy to thrive and the time to be separated by non-issues, we need to focus more on things that bring change to our industry. South Africa has great potential what lacks is coordination and some historic remnants which if we can cross over them, prosperity is certain.

One quote that has been in my mind this week comes from businesswoman and author, Jilian Michaels, who once said: "It's not about perfection, it's about effort. When you implement that effort in your life every single day, that's where transformation happens. That's how change occurs. Keep going and always remember why vou started."

We need courage and courageous women and men who will forge ahead despite challenges and who will pave a way for the generations to come. The beauty about the next generation is that they will not be dealing with many stereotypes and biases because those are fast diminishing as witnessed recently at the ICAO Assembly. Let's embrace the moment and be better people with a purpose.



KENYA AIRWAYS & ROYAL AIR MAROC **REACTIVATE** CODESHARE

Kenya Airways (KQ) and Royal Air Maroc (RAM), have today signed an agreement to resume their Codeshare partnership, previously initiated in 2016 and discontinued in 2019.

Under the new agreement, Royal Air Maroc passengers will be able to travel to Nairobi, Zanzibar and Johannesburg on KQ's network. KQ passengers will benefit from its network connections to the cities of Casablanca and Marrakech, as well as from the possibilities offered by the Moroccan national airline in terms of onward international travel, through its hub in Casablanca.

"This partnership strengthens our connectivity to the East and South of the African continent, thanks to a long-standing reliable partner, Kenya Airways. It will enable our passengers to reach Nairobi and Johannesburg, two important economic and financial

capitals, as well as Zanzibar, a popular tourist destination», said Mr. Abdelhamid ADDOU, Chairman and CEO of Royal Air Maroc.

He added: "We are pleased to continue to facilitate our customers' travel experiences and to develop our partnership strategy in the service of our position as the leading continental operator."

Commenting on the code share partnership, Mr. Julius Thairu, KQ's Chief Commercial and Customer Officer said, "We are very happy to see this partnership reactivated as it will provide our travelers with improved connectivity options between our two hubs, Nairobi and Casablanca. Our customers will be able to enjoy the financial center of Casablanca and the tourist destination of Marrakech."

Royal Air Maroc currently operates three weekly frequencies to Accra (Ghana) from Casablanca and will add three flights through its codeshare with KQ to Nairobi (Kenya) linking Accra to Johannesburg (South Africa) and Zanzibar (Tanzania).

KQ currently operates seven weekly flights between Nairobi and Accra. This new partnership will enable it to offer three flights per week to Casablanca and Marrakech, via Accra, the capital of Ghana.

SAFETY PROMOTION - DELIBERATELY **D**IFFERENT



AFFORDABLE QUALITY - STARTING AT US\$ 99 WE TRAIN YOUR STAFF IN AFRICA - ALREADY FOR 27 YEARS.....

ICAO STANDARDS ARE OUR STANDARDS





COURSE SCHEDULE

- Incident investigation

 Ground Operations Safety Airport Wildlife Management

• Leadership & teamwork in aviation



MORE INFO & BOOKING: www.aviassist.org/shop



Safety Promotion for the African aviation industry since 1995

AN IMBALANCED AVIATION VALUE CHAIN

A recent study of profitability trends across the aviation value chain shows that it varies widely by sector and as a whole - airlines underperform on the financial return that an investor would normally expect. Conducted by the **International Air Transport Association** (IATA)and McKinsey & Company, the study shows there is no clear path to rapidly re-balance the value chain, but there are some key areas - including decarbonisation and data-sharing where working together could mutually benefit all value chain participants

Some of the highlights from the report Understanding the Pandemic's impact on the Aviation Value Chain study show:

- Capital Destruction: Despite delivering consistent • operating profits pre-pandemic (2012-2019), airlines collectively did not produce economic returns above the industry's weighted average cost of capital or WACC. On average the collective Return on Invested Capital (ROIC) generated by airlines was 2.4% below the WACC, collectively destroying an average of (US) \$17.9 billion of capital each year.
- Value Creation: Pre-pandemic, all sectors of the value chain except airlines delivered ROIC in excess of the WACC, with airports leading the pack in the absolute value of return by rewarding investors with an average of (US) \$4.6 billion annually above the WACC (3% of revenue). When viewed as a percentage of revenue, Global

Photo by Guillaume LORAIN on Unsplash: On average the collective Return on Invested Capital (ROIC) generated by airlines was 2.4% below the Weighted average cost of capital.

> Distribution Systems (GDSs)/Travel Tech firms topped the list with average returns of 8.5% of revenues above the WACC (US) \$700 million annually, followed by ground handlers (5.1% of revenue or (US) \$1.5 billion annually), and Air Navigation Service Providers (ANSPs) at 4.4% of revenues (US) \$1.0 billion annually).

Pandemic Changes: Although the pandemic (2020-2021) saw losses across the value chain, in absolute terms airlines' losses led the pack, with ROIC falling below the WACC by an average of (US) \$104.1 billion annually (-20.6% of revenues). Airports saw ROIC fall (US) \$34.3 billion below the WACC and generating the largest economic losses as a percentage of revenue (-39.5% of revenues).

"This research re-affirms that airlines improved their profitability in the years following the Global Financial Crisis. But it also clearly shows that airlines, on average, were not able to benefit financially to the same degree as their suppliers and infrastructure partners. Rewards across the value chain are also disproportionate to risk. Airlines are the most sensitive to shocks but have limited profits with which to build a financial buffer." said Willie Walsh. IATA director general.

"The pandemic saw all players fall into economic losses. As the industry recovers from the crisis, the study's most important question is: can a more balanced distribution of economic returns and risk be realised in the post-pandemic world?" said Walsh. Several changes in the profile of airline economic returns are noted in the study namely:

- While network carriers underperformed the low-cost sector (LCCs) pre-pandemic, average economic returns by network carriers exceeded those of the LCCs during the pandemic. The gap between the two, however, has narrowed as the recovery progressed.
- Airlines solely operating cargo flights have a profitable financial performance with an ROI of nearly 10%. Thus,

the profitability of all-cargo carriers was the reverse of airlines carrying both passengers and cargo. By comparison, the performance of all cargo carriers is still well below the average ROIC for freight forwarders which began the crisis at nearly 15% of revenues and grew to 40% of revenues by 2021.

Regionally, it was clear that as a whole North American carriers entered the crisis with the healthiest balance sheets and strongest financial performance. The picture of recovery was less clearcut in 2021, but having fallen the deepest in the crisis, the trajectory of the region's recovery is also the steepest.

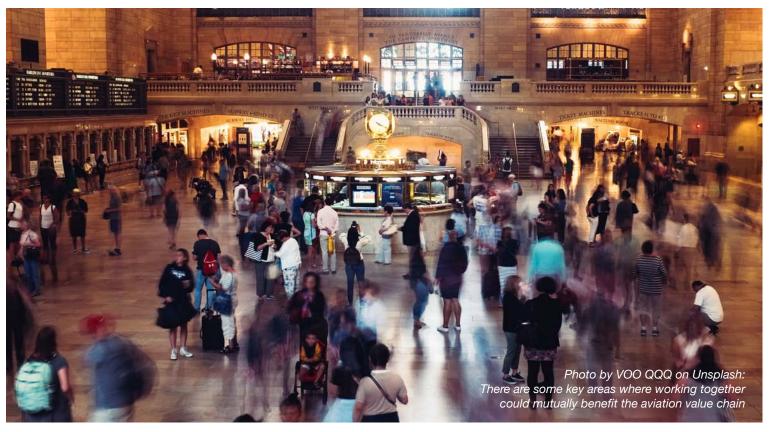
WHY DO AIRLINES GENERATE INSUFFICIENT ECONOMIC RETURNS?

An updated analysis of the forces shaping airline profitability originally done in 2011 with Harvard Business School Professor Michael Porter demonstrates there has been little positive change. The following must be taken into account:

- Competitive Fragmented Industry: The airline industry is intensely competitive, fragmented and subject to high barriers to exit with low barriers to entry.
- Structure of suppliers, buyers and channels: A high concentration of powerful suppliers, the emergence of increasingly efficient alternatives to air travel, commoditised product offerings with low switching costs and a fragmented buyers' community are characteristics of the operating environment.

"It is difficult to see how these entrenched forces will change significantly in the near term. In most cases, the interests of those in the value chain are simply too divergent to work as partners to drive change that could meaningfully alter the profitability profile across the value chain. That is why IATA will continue to call on governments to better regulate our monopoly or near-monopoly suppliers like airports. ANSPs and GDSs." said Walsh.

Recent IATA polling shows public understanding of the need to regulate monopoly suppliers. Some 85% of consumers polled in an 11-country survey agreed that the prices that airports charge should be independently regulated, like utilities.



CO-OPERATION

Some areas of common interest where greater co-operation would deliver benefits for all in the value chain were identified. These are:

- Data-driven efficiency gains: Aviation generates vast amounts of data. At the operational level, sharing data to build a more complete picture of how day-to-day decisions impact customers, airports terminals, airline schedules/crew movements, and runway utilisation is already helping to drive efficiencies for all industry players at some airports. This same principle can be applied across the industry to make better long-term decisions in areas including infrastructure development, process improvements, and skills development.
- Decarbonisation: Achieving net zero carbon emissions by 2050 cannot be done by airlines alone. Fuel suppliers need to make sustainable aviation fuels available in sufficient quantities at affordable prices. ANSPs need to provide optimal routings that minimise emissions. Engine and aircraft manufacturers must bring to market aircraft that are more fuel efficient and take advantage of low or zero-carbon propulsion means such as hydrogen or electricity. Those offering service in the airport environment will need to convert to electric vehicles.

"There is no magic solution to rebalance the value chain. But it is clear that the interests of governments, travellers and other value chain participants are best served by financially healthy participants - and particularly airlines. A combination of better regulation and co-operation in areas of mutual interest could move the needle. And there are at least two areas ripe for collaboration and burden sharing - pursuing data-driven efficiency gains and decarbonisation," said Walsh. "We are proud to partner with IATA since 2005 on understanding the value created across the aviation value chain. Over that time, the aviation industries have seen several crises and comebacks. But never has the aviation value chain overall returned its cost of capital. Airlines have consistently been the weakest element, even in their best years not quite returning cost of capital. But there are win-wins, and companies across the value chain can work better together to serve customers, and improve value," said Nina Wittkamp, Partner at McKinsey.

TAILOR MADE

