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AVIATION TURKEY



ANNUAL GENERAL
MEETING & WORLD AIR
TRANSPORT SUMMIT 2023
ISTANBUL 4-6 JUNE

**A MESSAGE FROM WILLIE
WALSH IATA DIRECTOR
GENERAL**



**AN EXCLUSIVE
INTERVIEW WITH DR.
MAX KOWNATZKI
SUNEXPRESS CEO**

**ISTANBUL SABIHA
GÖKÇEN AIRPORT
CELEBRATES WOMEN
IN LEADERSHIP**

**PEGASUS CEO GÜLİZ
ÖZTÜRK: "WE ARE
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Basım Tarihi

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Yayın Türü

Süreli

content



A Message from
Willie Walsh
IATA Director
General



Chair of the IATA
Board Governor,
Mehmet T. Nane: "
All our efforts are
also strategized
in tandem with
our Sustainability
(ESG)
perspective"



Director General of
EUROCONTROL
Raúl Medina: " As
a civil- military
organisation
we are uniquely
positioned
to bridge the
interests of both
civil and military
users of Europe's
airspace."

nts



24

Pegasus CEO Gliz ztrk: "As Pegasus Airlines, we are committed to IATA's 2050 Net Zero Carbon Emissions target"



28

Interview with Dr. Max Kownatzki, SunExpress CEO

40
Hitit CMO Nevra Onursal Karaađaç: "We have 65 partners from 47 countries across six continents"



61

Boeing, İstanbul Technical University & Turkish Airlines (THY) signed the Trkiye Sustainable Aviation Platform!



52

myTECHNIC: Centrally Located in the Heart of Aviation



66

Emirates Future Order Book for Around 200 Aircraft from Airbus and Boeing



Welcome to Istanbul; A Bridge Between East and West..

Along with Istanbul's historic role as a pivot between East and West, it has a significant role as an aviation hub and global connector. This year the IATA Annual General Meeting (AGM) and World Air Transport Summit held in Istanbul, Türkiye, 4-6 June 2023, hosted by Pegasus Airlines and co-hosted by AnadoluJet.

This year's topics are focused on the recovery from the pandemics, economic uncertainty, sustainability and air connectivity. There will be an opportunity to recognize aviation's vital support for relief and recovery efforts at the event. The post-pandemic aviation era continues to unfold. Demand

is recovering but other challenges are emerging. According to the IATA experts two key forces that are shaping global aviation: a changing energy landscape and shifting supply chains.

The 2023 panels will cover aviation's contribution in the aftermath of the earthquake that struck Southern Türkiye and Northern Syria earlier this year as aviation is a critical lifeline for first responders and relief supplies; IATA's 25by2025 initiative, explore why all aspects of diversity are important for airline leaders; Airlines commitments on achieving net zero carbon emissions by 2050, cabin waste, non-CO2 impacts of aviation on climate



change; financing the transition to Sustainable Aviation Fuel (SAF); Lessons learned from 2022's operational challenges in some key hubs—primarily in North America and Europe; data's

contribution to the bottom line, look at ownership and management of airline data, discuss how to keep data safe from hackers and what to expect next in regulation; CCOs for their view



on post-pandemic trends in business / leisure travel, how sustainability fits into commercial offerings, and the potential for airline retailing.

Mehmet Tevfik Nane, Chairperson of the Board of Directors

at Pegasus Airlines, assumed the role of Chair of the IATA Board of Governors for a one-year term starting from the conclusion of the 78th IATA Annual General Meeting in Doha, Qatar on

June 21, 2022. Nane became the 80th chair of the IATA BoG, having served on the BoG since 2019. As of June 2023, Yvonne Manzi Makolo, CEO of RwandAir, will take over as Chair of the BoG, succeeding

Nane. Makolo will be the first woman to hold this position.

Enjoy the issue... [👉](#)

Ayşe Akalin
Editor in Chief

A handwritten signature in black ink, appearing to read 'Ayşe Akalin'.



A Message from Willie Walsh IATA Director General

“ It is good to be back here in Türkiye for what will be a stimulating AGM. Türkiye is a fast-growing market and a key connector for intercontinental travel. Türkiye’s rich history and culture is admired the world over and the country is attracting both tourism and business investment. This makes Istanbul the ideal location for industry leaders to address the industry’s most pressing challenges.

This year’s AGM is held against a backdrop of industry recovery but wider economic and geopolitical uncertainty. The first quarter of this year ended on a strong note for air travel demand. Domestic markets have been near their pre-pandemic levels for months. And for international travel two key waypoints were topped. First, demand increased by 3.5 percentage points compared to the previous month’s growth, to reach 81.6% of pre-COVID levels. This was led by a near-tripling of demand for Asia-Pacific carriers as China’s re-opening took hold. And efficiency is improving as international load

factors reached 81.3%.

As traveler expectations build towards the peak Northern Hemisphere summer travel season, airlines are doing their best to meet the desire and need to fly. Unfortunately, a lack of capacity means that some of those travelers may be disappointed. Part of this capacity shortfall is attributable to the widely reported labor shortages impacting many parts of the aviation value chain, as well as supply chain issues affecting the aircraft manufacturing sector that is resulting in aircraft delivery delays. However, a significant share of recent flight cancellations, primarily in Europe, are owing to job actions by air traffic controllers and others. These irresponsible actions have resulted in thousands of unnecessary cancellations. This is unacceptable and should not be tolerated by the authorities.

The air cargo story is more volatile. Most of the indicators for the fundamental drivers of air cargo demand are weak or weakening. While the trading environment is tough, there is some good news. Airlines are getting help

in managing through the volatility with yields that have remained high and fuel prices that have moderated from exceptionally high levels. Looking ahead, with inflation reducing in G7 countries policy makers are expected to ease economic cooling measures and that would stimulate demand.

Airlines have demonstrated their resilience in bringing capacity back to match strong travel demand as the world opens again. But high inflation, economic slowdown, and the unpredictable situation regarding the war in Ukraine are all challenges for airlines to manage. Meanwhile the work to achieve our industry commitment to net zero CO2 emissions by 2050 continues unabated. These issues will all be in focus during our discussions in Istanbul.

As we begin our AGM, we are deeply conscious of the trauma of the terrible earthquake which has devastated southern and central areas of Türkiye as well as parts of Syria. Many IATA members have been involved in assisting relief efforts and the delivery of aid. When

crises strike, aviation is there. Connectivity is essential to get aid and first responders to where they are needed. Airlines helped save lives in the immediate aftermath of the earthquake. And airlines continue to help accelerate the recovery with vital cargo shipments.

We extend our sympathies to our colleagues and friends in Türkiye at this difficult time. We hope our AGM can in some small way help to symbolize the recovery and resilience of Türkiye and its people from this tragedy.

During crises, we bring hope, relief, and aid, striving to rebuild lives together. Each and every day, airlines make an enormous positive contribution to humanity by connecting people, cultures, businesses and economies. This fosters economic growth and social development. With that in mind, we encourage all our stakeholders to join us in ensuring that aviation can fulfil this role by becoming ever more safe, secure, reliable and sustainable. I for one am proud to be part of an industry that makes such a difference.

Chair of the IATA Board Governor, Mehmet T. Nane: "All our efforts are also strategized in tandem with our Sustainability (ESG) perspective"



Mehmet T. Nane's leadership and forward-thinking approach has positioned Pegasus Airlines as a resilient and innovative player in the Turkish aviation industry. With a commitment to utilising technology, prioritising sustainability, and staying attuned to customer demands, Pegasus Airlines is well-prepared to adapt to the changing landscape and continue its success in the post-pandemic era.

Mehmet T. Nane, the Chairperson of the Board of Directors at Pegasus Airlines and Chair of the IATA Board of Governors, believes in the transformative power of technology and its wide-ranging benefits. From sustainability efforts to the future digital strategy of the airline, Mehmet T. Nane envisions opportunities for both Türkiye and Pegasus Airlines.

Digital Transformation for Enhanced Customer Experience

One of the main drivers of post-pandemic aviation, as with many sectors, is the ever-growing importance of digitalisation. Pegasus has been investing in travel with minimum contact, with express check-ins, baggage drops, and boarding processes. Mehmet T. Nane also emphasises their commitment to enhancing the digital experience for its guests. Pegasus' digital strategy revolves around improving the overall digital experience. "Companies that use technology effectively can provide a better guest

experience, more efficient and flawless operations, and offer their employees a creative and innovative working environment. We invest in products and tools that make every stage of the journey easier, better, and more seamless for our guests." Pegasus aspires to be one of the airlines at the forefront of utilising technology effectively.

Digitalisation and Sustainability

The digitalisation of the aviation industry goes hand in hand with sustainability. The efforts to digitalise mean new technologies and new ways of doing business. These technologies not only help increase operational efficiency to alleviate environmental burden, but also empower both passengers and employees for an easy, consistent and personalized experience. Mehmet T. Nane highlights the airline's commitment to reducing its environmental impact: "Technology is an important factor in driving the future sustainability of our industry as part of our commitment to Net Zero by 2050, and this is also a vital part of our decision-making process. First of all, we need to measure our environmental impact to improve our performance and digitalization is at the heart of measuring, reporting, verifying emissions, and indicates us more impactful solutions to focus on. It also helps us improve our processes and our speed, reduce friction and waste."

Commitment to Sustainable Aviation

In line with these commitments,

Pegasus Airlines is actively exploring many ways to reduce its environmental impact, including continuous investment in young and fuel-efficient aircraft, optimising flight operations, and investing in renewable energy sources. Mehmet T. Nane believes that sustainable aviation is not only a moral imperative but also a business opportunity. By embracing sustainable practices, Pegasus Airlines aims to contribute to the long-term viability of the aviation industry while meeting the growing expectations of younger and more environmentally conscious travellers. Yet these developments do not guarantee that the future of sustainable air travel is problem-free. Nane sees the biggest challenge standing in the way is fuel. Sustainable Airline Fuels (SAF) are scarce, and at the moment, they are several times more expensive than jet fuel: "All our efforts are also strategized in tandem with our Sustainability (ESG) perspective. Until such time when we can technologically and economically replace global aircraft fleets with alternative energy sources such as hydrogen, our sustainability efforts must focus on the use of SAFs. Governments should evaluate the value in the local production of SAF and create incentives for increased production and make it affordable for airlines. This will carry the industry towards its net zero target."

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Climate Change is the World's Greatest Macro-Economic Shock

By Marie Owens Thomsen, IATA Senior Vice President, Sustainability and Chief Economist

IATA's newly established Sustainability and Economics Division allows us to address the challenge of flying net zero by 2050 in a more holistic manner. The impacts of climate change on our global economy touches absolutely everything and everybody. At its core, the issue is about weening the global economy off its fossil-fuel dependency. All production processes need to evolve, we need to consume differently, and we are likely to have to confront more catastrophic weather events and dire living conditions which will increase displacement and migration. This will affect GDP, exchange rates, interest rates, unemployment, economic policy, and all facets of the global economy. As such, it is a systemic challenge, in need of systemic responses.

Systems thinking

Much of our thinking

is compartmentalized, or siloed. Even in our universities we slice the topics up into pieces and behave as if they are somehow separate. One immediate consequence of climate change is that it has brought with it a greater understanding of our interdependencies. The biosphere encompasses the global ecosystems upon which much economic activity rests and upon which our survival depends. It is now more obvious that a system is not the sum of its parts, but the product of their interaction.

Our mission is to provide analysis that facilitates and promotes air transportation's transition to net zero by 2050. In doing so, we will rely not only on our own sustainability experts and economists, but on all of IATA as well as on our member airlines, partner external organizations and academia. We will need everybody's knowledge,



Marie Owens Thomsen & Ayşe Akalın

and we will need all possible solutions combined to succeed in this mission.

Optimizing use of data and analytics

Data is the foundation of all our analysis. At IATA we have privileged access to industry data provided by our member airlines. We complement our

industry data with data from external sources and seek to promote wider data sharing across our value chain and beyond. We work on developing models that help us extract maximum information value.

Every crisis generates the need for new sets of data and new metrics. Data development on the economics side has reached a level of maturity that contrasts with the vast need for new data on the environmental side. Getting everybody to agree on definitions is also a challenge. The lack of such norming and harmonization of metrics makes any comparative analytics that much more difficult. It is important to know that the sustainability field is still a nascent one, one that is in a constant state of flux, and one where many decisions will have to be made based on insufficient information.

Preparing for a transformative future

Armed with our data and analytical capabilities, we are working on assessing all existing and potential

future solutions along three dimensions: when they will be available, their capacity to reduce carbon emissions and their cost. This work will help us flesh out our more conceptual path to flying net zero by 2050 and help us put options into perspective and order our priorities. Most large-scale solutions lie some time ahead of us. While working towards facilitating those, we will strive to take action on multiple fronts that are more readily within reach.

Aviation finds itself within one of its fastest ever transformations, born out of necessity, to ensure that flying sustainably becomes a reality by mid-century. Our goal is to decarbonize aviation without reducing aviation's historic and growing role in supporting freedom of movement and commerce. We firmly believe that air transportation is a form of connectivity that the world cannot do without. Hence, the only way forward is to fly more sustainably and our role at IATA is to support that transition as best we can 🌍



Biography of Marie Owens Thomsen

Marie joined IATA in 2022 as Chief Economist. In January 2023 Marie added responsibility for IATA's Environment and Sustainability activities to her role.

Marie joined IATA from Lombard Odier where she was Head of Global Trends and Sustainability. Her 30-year professional life includes roles for both investment banks and private banks, including HSBC in London, Merrill Lynch in Paris, and Indosuez in Geneva. Outside of the financial sector Marie worked for IKEA, and she also founded and managed her own company in the equine industry.

Marie holds an MBA from the University of Gothenburg in Sweden, and a PhD in International Economics from the Graduate Institute in Geneva, Switzerland. She speaks Swedish, English, and French fluently.



Director General of EUROCONTROL Raúl Medina: "As a civil- military organisation we are uniquely positioned to bridge the interests of both civil and military users of Europe's airspace."

Ayşe Akalın: Can we start our interview by taking some personal information about you? Can you briefly introduce yourself to our readers? What can you tell us about your background, your career in the field of aviation?

Raúl Medina: I come from Spain – from Madrid – and I studied aeronautical engineering there before joining Siemens as a systems engineer. Later I moved to the Spanish Ministry of Transport – but always

within the air transport sector. In 2015 I was appointed Director General of Civil Aviation, in which role I worked closely with EUROCONTROL, including acting as President of EUROCONTROL's governing body, the Provisional Council.

I am extremely proud to have become Director General of EUROCONTROL – it is a remarkable organisation and it is extremely important for European aviation, especially now as it emerges from the impact of the pandemic and as it faces

major challenges ahead, for example on capacity and on sustainability.

Ayşe Akalın: Can you elaborate on the importance and position of EUROCONTROL, a pan-European, civil-military organisation dedicated to supporting European aviation, in European and global aviation?

Raúl Medina: EUROCONTROL was founded over 60 years ago and has grown from its six original Member States to,



by Ayşe Akalın

at present forty-one (plus 2 Comprehensive Agreement States), covering almost all of Europe: from Ireland to Armenia, and from Finland to one of our Comprehensive Agreement States, Morocco. We are still growing – Iceland is set to become our next Member State at the beginning of 2025.



EUROCONTROL has many roles, including acting as the Network Manager, billing and collecting route charges, providing training from our Aviation Learning Centre in Luxembourg, and operating the Maastricht Upper Area Control Centre (MUAC, controlling the airspace above 24,500 feet over the Netherlands, Belgium, Luxembourg and part of Germany). A founding member of the SESAR Joint Undertaking (which is now located on our headquarters site), we also work on the future of ATM (air traffic management), from research to implementation, mostly through our EUROCONTROL Innovation Hub in France.

While we work closely with the European Union in many areas, our geographic

coverage is much wider. As a truly pan-European body, we act in the interests of all our members, including those not within the EU, such as Turkey. We also work closely with ECAC, for example at ICAO, where EUROCONTROL plays a vital role, contributing to the global regulation of ATM and ensuring that the interests of our Member States are represented. As a civil-military organisation we are uniquely positioned to bridge the interests of both civil and military users of Europe's airspace, ensuring that the military's mission can be carried out while minimising the impact on civil aviation.

Ayşe Akalın: As Director General of EUROCONTROL, can you describe the main tasks associated with the role you hold?

Raúl Medina: A major element of my role is to set the strategic direction for the Agency. This was an immediate priority for me on taking up the role of Director General and we have now developed the strategy "Raising the Bar: Building EUROCONTROL 2030". This focuses on taking European aviation to the next level, moving fully into the digital era, overcoming the challenge of efficiently managing traffic growth and taking a leading role in supporting the transition to green aviation. Technology, innovation, international engagement and people are the key drivers that will

allow us to achieve our goals and keep delivering tangible added value to the aviation community.

Aviation Turkey: Can you elaborate on the post-pandemic situation of European and global aviation and on the challenges that aviation sector will face/experience in the coming period?

Raúl Medina: Demand for travel has recovered but it is still weaker than was forecast before the pandemic. In part, this is as a result of the economic effects of the pandemic – and also of the war in Ukraine. Last April, we forecast that by 2050 we would see 16 million flights per year in the pan-European Network, around 10 years later than was forecast before the pandemic. However, that forecast didn't factor in the impact of the war in Ukraine, which is expected to delay traffic growth.

In any case, this level of growth (from 11 million flights in 2019) generates huge challenges. In 2019 we saw extensive capacity driven delays and our Air Traffic Management system at present would not be able to handle 16 million flights. We will need to change the way we do things – quite radically, with user trajectories shared and de-conflicted in real time. A lot of work is already happening to prepare for this change but much more is required if we are to be ready for the

growth in demand.

At the same time, we will also have to handle new and different types of traffic, such as high-altitude craft, unmanned aircraft and also aircraft with new types of propulsion systems and different performance characteristics (for example, electric or hydrogen based propulsion). These will be vital as part of the response to another major challenge – that of achieving Net Zero by 2050.

Ayşe Akalın: Demand for air travel is rebounding after Covid-19, but there are disruptions, flight cancellations and delays, and chaos at airports across Europe. How can this happen? Did the industry fail to forecast the right traffic recovery or fail to properly prepare?

Raúl Medina: During the pandemic it was clear that there was a great deal of demand for travel – just waiting until it became possible. However, even at the beginning of 2022, it was not clear exactly when this surge would occur as new variants (such as Omicron) were a very real concern, slowing the relaxation of travel restrictions. At the same time, every part of the aviation sector was starved of income and so there were very significant difficulties with ramping up capacity, whether that was in immigration, airports, baggage handling or airlines. Overall, we do not expect this summer to see the sort of

INTERVIEW

issues encountered in 2022 – although it will still be a very challenging summer.

A particular concern for this summer is the risk of extensive flow management delays caused by a lack of capacity. We are anticipating traffic levels that will be close to 2019 levels and, in many places, significantly above 2019. Moreover, we are now operating with up to 20% of Europe's airspace unavailable as a result of Russia's invasion of Ukraine. EUROCONTROL, as the Network Manager, is working very closely with airlines, airports and air navigation service providers (ANSPs, such as DHMI) to prepare for this summer and to minimise the risk of delays and disruption. However, it will need everyone working together to meet this challenge – see All Together Now 2023.

Ayşe Akalın: The Single European Sky (SES) has been on the books for 20 years but so far no progress has been made in moving the SES forward. Maybe it is time to scrap the SES and put forward a new project or approach?

Raúl Medina: Although many think of the SES as a single transformative change, the reality is that the move to a Single European Sky is an evolutionary process. We will not wake up one morning to find that the SES is suddenly there. Rather, it consists of many advances

across the spectrum of ATM. For example, one aspect of implementing the SES is to move away from rigid route network management to trajectory-based operations where aircraft should be able to take the best possible route (as determined by the airlines themselves). This is the concept of Free Route Airspace and it is already happening. Most of Europe has FRA and we are rapidly moving ahead to make the FRA cross-border and 24/7.

Similarly, a great deal has been done behind the scenes on how we exchange data – a vital step of being ready for the idea I mentioned earlier of user-defined trajectories updated, shared and deconflicted in real time.

That said, I understand the frustration that more is not being done – and more quickly. EUROCONTROL is committed to helping make change more easy and more effective. The key for the success is collaboration between all the actors and working together towards the same goal. We need to think Network, and not focus only on local requirements. The collaborative approach is something we champion in EUROCONTROL. We have recently welcomed our colleagues from the SESAR Joint Undertaking (focusing on research and development) in our building, and also the SESAR Deployment Manager. This co-location, together with a dedicated liaison office from EASA (also on our site),

will help in uniting us behind making the Single European Sky a reality.

Ayşe Akalın: How do you convince the states about the benefits of implementing the SES?

Raúl Medina: It is very clear that we will not be able to handle 16 million flights a year by 2050 without a major update of the ATM system in Europe. The programmes making up the SES are essential to achieving that update and we do not experience difficulties convincing states, or indeed other stakeholders, that change is required.

Aviation Turkey: How do you see the EUROCONTROL's relations with Türkiye? What can you tell us about programs/projects that EUROCONTROL supports and cooperate with Director General of Civil Aviation (DGCA/SHGM) and State Airports Administration (DHMI) in Türkiye?

Raúl Medina: We have extremely good relations with Türkiye and we work very closely both with SHGM and with DHMI. Over the past decade, Türkiye has become an ever more important part of the EUROCONTROL Network. In terms of aircraft movements, iGA Istanbul Airport is the busiest airport in the Network and Turkish Airlines is in the top three airlines. Türkiye is also a vital route for aircraft flying to and from Asia, especially

since Russian airspace has been effectively closed for many carriers.

There is a specific agreement with SHGM on the support that EUROCONTROL provides to Türkiye, for example on the steps being taken to ensure that Turkish regulations are fully in accordance with international standards and to support future ATM development in Türkiye.

EUROCONTROL has played a major role in the last few years (especially leading up to the commissioning of iGA Istanbul Airport), with detailed simulations and other work on the airspace design around iGA Istanbul Airport and Ankara Esenboğa Airport, on the ground operations at both these airports and on the introduction of Free Route Airspace (FRA) in Türkiye. The FRA simulation was the largest ever conducted by EUROCONTROL, involving more than 400 DHMI controllers coming to our innovation and simulation centre near Paris.

We have also been working closely with Turkish Airlines, Pegasus and SunExpress (as well as iGA Istanbul) on projects such as the early detection of diversions and the visualisation of reactionary delay. Many more projects are underway or in the pipeline: for example, a series of simulations at a number of airports as well as looking at the effect of adverse weather on airport

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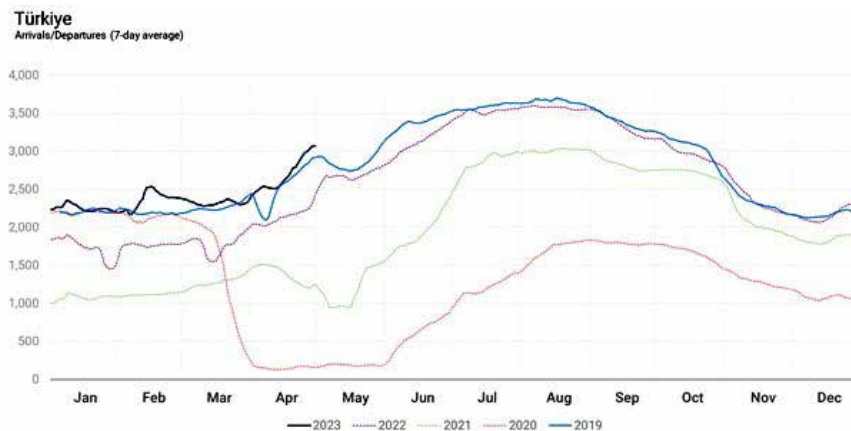


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INTERVIEW



capacity and on predicting taxi-in/out times at iGA Istanbul Airport. Türkiye is one of our most important partners and our intense and fruitful cooperation continues.

I would also like to mention that we have a number of staff in our organisation coming from Türkiye – enriching our organisation's expertise and providing value to the aviation sector across Europe.

Ayşe Akalın: Can you elaborate on the air traffic over Türkiye? How do you assess the density of Turkish airspace in terms of flight/air traffic? Compared to European countries, how is Türkiye in terms of air traffic density? Does Türkiye exceed its 2019 traffic volumes during the 2022?

Raúl Medina: In 2022, traffic to, from and within Türkiye was at 93% of the 2019 level. Since the start of the year, this

has increased and, for the first four months of 2023, it stood at 106% of the equivalent period in 2019, an average of 2,431 flights/day. If we include overflights, this figure rises to 3,608 flights/day, close to 2019 levels (+2%).

Rather than looking at air traffic density, we find that air traffic complexity is a more relevant measure. Aircraft maintaining a flight level and all heading in similar directions are less difficult to control than those that are climbing/descending or crossing. Here we see that a great deal of the traffic is heading west/east but that there are areas which are considerably more complex, notably near Istanbul, Ankara and, especially in the summer, Antalya.

Despite this, and even though traffic in Turkish airspace has increased rapidly over the last decade, en-route ATM delays have been very

low relative to other major countries – in fact there were none at all for each of the years from 2019 to 2022.

Ayşe Akalın: Can you elaborate on the positive and negative impacts of the Russia-Ukraine War on commercial aviation in Europe?

Raúl Medina: There are no positive impacts of the war. My first official visit after becoming Director General was to our Member State Ukraine and it was heartbreaking to see some of the appalling destruction inflicted on Ukraine by Russia. EUROCONTROL stands strongly with our Member State; we are supporting our colleagues there with detailed planning of how aviation might recover once hostilities have ceased and with the training of relevant staff to help in this process.

Looking at the Network as a whole, we have up to 20% of our airspace unavailable, military activity outside

Ukraine has tripled since the start of the war and many carriers have to take much longer routes to and from Asia, resulting in additional time, cost and also more emissions. The war has also had a significant economic impact, which also has a negative effect on aviation.

Ayşe Akalın: Can you elaborate on your short and long-term objectives in the field of sustainability? How would you summarize EUROCONTROL's ongoing sustainability efforts?

Raúl Medina: Policy makers and the European aviation industry have committed to reaching NetZero emissions by 2050. It is EUROCONTROL's task to support European aviation in these efforts and sustainability is firmly established as one of our strategic priorities. I believe EUROCONTROL has a strong role to play in sharing its data and expertise and in coordinating action by various players in the sector. At the end of the day, we will need everyone on board to fundamentally transform aviation and reduce our environmental footprint.

EUROCONTROL's role has a number of elements. For example, we already provide technical and data support to States and relevant EU bodies for the design and implementation of environmental policy measures (such as the EU



PEGASUS

The Route To
Net Zero



In line with IATA's 2050 Fly Net Zero commitment, we have also made our pledge! We are embracing our responsibility towards the environment and our world by investing in new aircraft that are best in class for efficiency, while also prioritising alternative and renewable energy sources.

Because, we're moving towards a sustainable future!



INTERVIEW

Emissions Trading System and ICAO's CORSIA); we are also actively contributing to ICAO's CAEP working groups. Accurate information is vital for decision-making on decarbonisation and climate adaptation and so we are developing a new platform of services, called FlyingGreen, to help all European aviation stakeholders. More widely, we work to inspire, inform and train a range of audiences about aviation sustainability challenges and decarbonisation pathways – based on reports and studies but using innovative communication channels, including podcasts – so tune in and follow our Raising the Aviation Bar (podbean.com).

Ayşe Akalın: At European level, what operational initiatives and policies do you consider most relevant to maximise aviation sustainability?

Raúl Medina: The key to making aviation more sustainable lies in close collaboration with aviation stakeholders. Being at the centre of European aviation we are closely involved in many different task forces and working groups dedicated to lowering the environmental impact of aviation operations. Our work ranges from our Flight Efficiency Task Force, which helps airspace users find the most efficient,

Air Traffic Data January–March 2023

	Flights/day	% vs 2019
UNITED KINGDOM	4,605	-13.9%
SPAIN	3,913	-2.0%
GERMANY	3,875	-25.9%
FRANCE	3,468	-11.9%
ITALY	2,870	-7.3%
TÜRKIYE	2,431	+5.6%
NETHERLANDS	1,354	-13.3%
NORWAY	1,212	-9.1%
SWITZERLAND	1,165	-11.7%
PORTUGAL	1,038	+7.4%

Air Traffic Data January–April 2023

	Flights/day	% vs 2019
UNITED KINGDOM	4,402	-14.6%
SPAIN	3,638	-2.7%
GERMANY	3,637	-28.0%
FRANCE	3,304	-11.7%
ITALY	2,665	-8.7%
TÜRKIYE	2,317	+4.3%
NETHERLANDS	1,294	-14.1%
NORWAY	1,192	-10.4%
SWITZERLAND	1,148	-12.6%
PORTUGAL	975	+8.4%

sustainable routes, to a step by step guide to measure, reduce and report the carbon footprint of ANSPs. Another aspect is climate change adaption. We are co-leading, with ACI Europe, a European working group to provide recommendations on how to increase the resilience of our operations and infrastructure. We also have a suite of Environmental Impact Assessment tools (for noise, emissions...) supporting Member States in making informed decisions.

Together with ECAC Member States, we created a European

SAF map to provide valuable information and to showcase European aviation industry efforts and contributions towards achieving long term climate ambitions in line with the objectives of the Paris Agreement. These are just some examples of our work and every single one of them is important. Making aviation sustainable requires a significant transformation of the sector and this can only be achieved if it is tackled from all angles. In conclusion, it is a basket of measures that the community should take to reduce the impact on environment.

Ayşe Akalın: In your opinion, what can aviation actors, from airspace users to airports, policy-makers and EUROCONTROL, do to make aviation more sustainable faster?

Raúl Medina: It's vital for everyone to look ahead and to invest in most sustainable technology and clean energy as early as possible, to accelerate the decarbonisation of our sector. Insist on collaborative decision-making with your partners and stakeholders and don't be afraid to challenge the status quo!

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Ayşe Akalın: What can you tell us about EUROCONTROL's relations with the Non EU states?

Raúl Medina: EUROCONTROL is pan-European; it is made up of 41 Member States and two Comprehensive Agreement States (Israel and Morocco), with another non-EU State, Iceland, set to join in January 2025. The work of the EUROCONTROL Agency is, and must be, for the benefit of all of EUROCONTROL and not just those states in the EU.

Part of that role is also to ensure the interests and specificities of our non-EU Member States, in terms of Air Traffic Management, are heard in interactions with the EU, seeking to make sure that EU policy-making reflects the needs of the whole of European Aviation and not just the EU states. Here we are aided by the fact that aviation is essentially

an international activity. Advances in Air Traffic Management (such as the introduction of Free Route Airspace) will be much more effective and beneficial if the whole of Europe is involved.

Similarly, at ICAO, the EU works closely with EUROCONTROL and ECAC so that a single European view is put forward – which is much more effective than each country acting on its own.

Ayşe Akalın: Can you elaborate on your activities in the fields of digitalisation, air navigation and artificial intelligence and your contributions and supports to the aviation in these fields?

Raúl Medina: Technology is a key driver for EUROCONTROL and we have embarked on a programme (iNM or Integrated Network Management) of replacing our core operational

systems with innovative digital products. This ten-year programme will result in a new digital architecture that will harness the power of innovation and enable EUROCONTROL, in its role as Network Manager, to deliver ever more integrated business services and products to its stakeholders.

One very visible part of that is a new building for our Operations Centre. We will shift operations there in October this year and it will have the capability to support the iNM transformation of our systems.

Topics such as ATM, UAM/U-space High Altitude Operations, Artificial Intelligence and Sustainability are top priorities for EUROCONTROL and significant progress has already been made, even in areas such as AI, where more than 30 applications are currently in the research or fast track innovation

pipeline. Several AI applications are already being used to support MUAC operations and the Network Manager tasks and functions.

Advances in all these areas are generally collaborative efforts, bringing together many aviation stakeholders, such as ANSPs, airports, airlines and original equipment manufacturers (OEMs). Despite their complexity, we are determined to speed up the process of research, development and implementation so that real tangible progress can be made.

Ayşe Akalın: Would you like to add anything in the way of a message for our readers?

Raúl Medina: I am strongly in favour of a collaborative, inclusive approach to address the challenges facing European aviation. Our sector depends on many partners working together, both in operations and also in developing new solutions for the future. EUROCONTROL is based on the concept of international cooperation and, over the last 60 years, it has grown to cover the whole of Europe. Türkiye was the 10th State to join – back in 1989. It has always been a valued member of EUROCONTROL and its aviation sector has grown rapidly in importance, especially over the last decade.

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Is Sustainable Aviation Fuel Just a Pipe Dream?

by Muhammed Yilmaz

The aviation industry is committed to achieving complete decarbonization by 2050, with all stakeholders onboard. However, the specific strategies and pathways for achieving net-zero emissions in aviation are still uncertain. Sustainable aviation fuels are considered a key component in the short-term efforts to achieve this ambition. But for the time being, the reliance on sustainable aviation fuels is more of a speculative and aspirational approach.

Dave Calhoun, the CEO of Boeing, has raised

doubts about the cost competitiveness of sustainable aviation fuels (SAF) compared to conventional jet fuels. If Calhoun's concerns prove to be right, it could pose significant challenges to the aviation industry's ambitions of reducing emissions and achieving net-zero by relying on climate-friendly biofuels.

Airlines believe that sustainable aviation fuels (SAF) derived from food waste, including biomass, used fats or oils, municipal waste, and agricultural residues could make a substantial impact on reducing carbon emissions by replacing conventional

aviation fuels. However, the current utilization of SAF remains relatively low, representing less than 1% of global aviation fuel consumption. Additionally, the cost of SAF is currently at least twice as high as that of standard aviation fuel.

Boeing's CEO, Calhoun, has recently claimed that "biofuels like SAF will never achieve the price of jet fuel." This statement can be seen as an influential opinion that reflects the industry's ongoing concerns about the challenges and costs associated with decarbonizing the aviation industry.

Calhoun's assertion that

"the emperor has no clothes" found resonance among various prominent figures in the industry. Experts acknowledge that cost-effective production methods for sustainable aviation fuels (SAF) have yet to be discovered. Their observations make it evident that if such methods had already been identified, they would have been implemented by now.

In 2021, the International Air Transport Association (IATA) established the ambitious goal of achieving net zero emissions by 2050. As part of this commitment, sustainable aviation fuels (SAF) are expected to play a significant role, accounting



manufacturing companies to increase the availability of SAF for aircraft. However, it is important to note that despite these efforts, the desired results have not yet been achieved.

How Much Does Sustainable Aviation Fuel Cost?

As of May 19, 2023, the price of sustainable aviation fuel (SAF) in the United States was \$6.83 per gallon, compared to \$2.34 per gallon for Jet A-1, the conventional aviation fuel. It is important to note that achieving net zero emissions requires more than a new, cleaner fuel.

Transitioning to 100% sustainable aviation fuel (SAF) indeed involves more than just fuel composition. It necessitates adapting the existing fuel infrastructure at airports and on aircraft to accommodate biofuels. This requires a strategic and transformative shift in the design of future aircraft.

Boeing and Airbus have committed to ensure that their aircraft are 50% compliant with SAF at present and achieve full compliance by 2030. To support these efforts, Boeing is launching Cascade, a modeling tool designed to assist airlines and policymakers in assessing decarbonization strategies. Despite these initiatives, the consensus among industry experts is that the commercial

operation of Airbus or Boeing aircraft running on 100% SAF within the next five years is highly unlikely.

In November 2021, Airbus achieved a significant milestone by conducting its first flight using 100% SAF with the A350 aircraft. This development marked an important step towards the industry's aspiration of commercializing and widely adopting 100% SAF flights, particularly in narrow-body aircraft. Building on this progress, Airbus successfully conducted a 100% SAF flight using the A321 aircraft in March 2023.

SAF is currently compatible with commercial and military aircraft, as well as helicopters, and can be blended with conventional jet fuel up to a maximum of 50%. The use of such a combination does not require any engine modifications. In practice, airlines often choose to fuel one of the two engines on board with SAF, while the other engine operates on conventional jet fuel.

Simply relying on 100% SAF for both engines can already reduce carbon emissions by up to 80% on flights. To address the remaining 20% of emissions not related to the specific flight, carbon offsetting is typically employed. However, it is important to recognize that even if all challenges associated with SAF are resolved, relying solely on SAF does not guarantee the

desired outcomes in terms of emissions reduction.

SAF could potentially pose a threat to forests!

Industry experts raise concerns that the increasing demand for SAFs could deplete feedstock derived from food fats, leading to a greater reliance on crops and potentially posing risks to forests or creating competition for land needed for food supply. In response to this challenge, the Biden administration has proposed utilizing agricultural waste generated alongside corn and soybeans, as well as woody biomass from western states. As one would expect, however, these proposals alone offer limited solutions to address the raised concerns.

According to analysts, the lack of assured long-term demand may deter investors from investing in new SAF production capacity. This hesitation could impede the cost reduction of this specialized product. US Secretary of Agriculture, Tom Vilsack, expressed that the tax credits provided by the IRA would assist the industry in overcoming the investment barrier. However, he also acknowledged that achieving price parity between SAF and traditional jet fuel is unlikely to happen in the near future. Therefore, it is clear from his demeanor that he is not very optimistic.

for 65% of the overall carbon emissions reduction process.

IATA President Willie Walsh has emphasized that the transition to achieving net zero emissions in the aviation industry will come with significant costs. Airlines have consistently communicated that passengers may experience higher fares due to the costs associated with decarbonization efforts.

The Joe Biden administration in the United States has included substantial clean energy subsidies, including tax incentives for sustainable aviation fuel (SAF) production, in the Inflation Reduction Act (IRA) introduced last year. Similarly, the European Union is also implementing measures to encourage airports and



Pegasus CEO Güliz Öztürk: "As Pegasus Airlines, we are committed to IATA's 2050 Net Zero Carbon Emissions target"



by Cem Akalın

Cem Akalın: Earlier this year, Türkiye experienced a devastating earthquake. What role did Pegasus play in response to the crisis?

Güliz Öztürk: We have been experiencing challenging times as a country. The pain we felt in the aftermath of the earthquake on 6th February is still fresh. I would like to again commemorate those who lost their lives - may they rest in peace - and wish a swift recovery to the injured.

From the first day of the earthquake, we have worked tirelessly in the field of transport, which plays a critical role, especially in

such challenging times. We operated domestic flights from Adana, Adıyaman, Diyarbakır, Elazığ, Gaziantep, Malatya, Kahramanmaraş, Şanlıurfa and Hatay free of charge between 7 and 28 February 2023 for those affected by the earthquake. Between 6 and 28 February 2023, we evacuated more than 150,000 people from the earthquake zones with 785 free evacuation flights. During these flights, we carried 110 tonnes of aid materials also free of charge. We carried more than 125,000 people and rescue teams on flights to the disaster zone. As well as continuing our transportation support, we also supported citizens

affected by the earthquake with financial aid. We recognise the need for long-term solidarity and as the Pegasus family, continue to do our part in assistance efforts, to sustain this support on a long-term basis.

Cem Akalın: In 2022, with the gradual return to normalcy in the aviation industry, how did Pegasus perform?

Güliz Öztürk: To meet the increased travel demand that has followed the easing of restrictions, we have made sure that our operational structure and our colleagues across all our business departments were ready; and we have

increased our capacity and enlarged our network with new destinations and frequencies. As a result of our meticulous and strategic efforts, we concluded 2022 successfully. Our 2022 revenue increased by 41% compared to 2019, which was the last full pre-pandemic year. Our passenger numbers grew by 33.7% year on year and its turnover by 139% to reach €2.45 billion. Reaching an EBITDA margin of 34.1% at the end of 2022, we achieved the highest performance in this metric for the aviation industry globally. We are on course to continue this success into 2023.

Cem Akalın: Pegasus is a growing airline. What are some areas of future growth?

Güliz Öztürk: Our operating region spans Europe, the Middle East, North Africa, and Central Asia, and we see a significant growth potential both in the total market and in the demand for low-cost carriers. Our fleet and network investments are dedicated to stimulating diversified growth across these regions while focusing on contribution to the network value. We currently have the lowest unit cost in the world, and we have a sizeable fleet growth in the pipeline to over 120 aircraft in 2025 from 96 in 2022.

Cem Akalın: Pegasus' current fleet strategy outlines a gradual switch to an all-Airbus fleet. What is the reasoning behind this strategy?

Güliz Öztürk: In 2012 we placed the single largest-ever aircraft order in Turkish civil aviation history at the time for 100 new Airbus A320neo and Airbus A321neo aircraft, and we have further extended our order to 114 aircraft. We plan for our fleet to consist solely of new generation A320neo and A321neo aircraft in the long-term. As an airline operating on a low-cost model, we seek efficiency in our day-to-day operations and we pay a great deal of attention to effective cost management. Our fleet



transformation strategy is a key driver on these fronts. A fleet structure consisting of younger and more eco-friendly aircraft is also an integral part of our sustainability strategy. As a happy coincidence, we envisage that hopefully, Pegasus will reach its 100th aircraft milestone on the 100th anniversary of Republic of Türkiye later this year.

Cem Akalın: Beyond investing in a new fleet, what measures are you implementing as part of your sustainability efforts?

Güliz Öztürk: For the airline industry, there are no easy solutions to the environmental sustainability issue. One of the main concerns as airline CEOs looking ahead will be our determined efforts in line with IATA's commitment to Net Zero Carbon

Emissions by 2050. As Pegasus, we have reinforced our commitment to this goal with our interim target for 2030. We aim to reduce our flight-related carbon (CO₂) emissions per unit passenger kilometre (RPK) by 20% by 2030 compared to 2019. We continue working to increase the use of Sustainable Aviation Fuels (SAF).

As Pegasus, being a low-cost carrier, we focus on efficiency, productivity, optimisation - and those also lead to lower fuel consumption & lower carbon emissions. Small environmental improvements can be made with operational efficiencies, but actually much bigger gains can be achieved by investing in new generation aircraft. Even with almost 100 aircraft, we now operate one of the youngest fleets

in the industry and this can be another major focus for airlines in the near term. In addition, a lot of efforts already implemented to reduce weight and to use of resources in an efficient manner that led to lower fuel consumption directly translate into lower carbon emissions. We are aware that on top of all the investments and effort, we still have a significant gap to close until we eventually achieve net-zero carbon emissions operations by 2050. Considering technologic impediments, increasing use of sustainable aviation fuel, and perhaps to a certain extent carbon capture tools will be required.

Cem Akalın: You recently took out a sustainability-linked aircraft-secured term loan. Could you tell us more about it?



Güliz Öztürk: Last year, we financed 10 new A321neo aircraft joining our fleet with a sustainability linked loan. This was the first of its kind for an export credit agency supported aircraft finance transaction. The terms of the loan are indexed on future achievements in respect of two sustainability-linked Key Performance Indicators (KPIs): carbon intensity of flights and gender diversity in management positions.

The loan is applied for the new generation, fuel-efficient CFM Leap powered and less CO2 emitting Airbus A321neo aircraft financing. This transaction is highly innovative and

remarkable in several respects: it is the first-ever aircraft export credit facility incorporating sustainability-linked features, as well as the largest aircraft-secured sustainability-linked term loan executed in the market to date.

With this financing, we reaffirmed our commitment to our long-term goals on carbon emissions and gender equality by addressing both environmental and social initiatives. I'm very proud of our entire team who pioneered this groundbreaking deal.

Cem Akalın: How did it come about, and what are the criteria?



Güliz Öztürk: As Pegasus Airlines, we are committed to IATA's 2050 Net Zero Carbon Emissions target. We have long-standing investment in making our operations less carbon intensive. We started utilising new generation A320/321neo family aircraft in our fleet back in 2016 and we became the launch customer of new generation CFM-Leap engines on our A320neo aircraft. Today, 75% of our fleet consists of new generation A320/321neo family aircraft. We do not see this strong transformation as sufficient for our future commitments. We are always seeking new ways to engage in different projects with potential to drive value out of investing in our sustainability principles.

Cem Akalın: How is Pegasus following up on its commitments in the areas of diversity, equality and inclusion (DEI)?

Güliz Öztürk: Diversity has always been integral to our vision. We aim to carry out all our DEI actions under the umbrella of our initiative Pegasus Harmony. We aim to make everyone's voice heard. For example, our company is now made up of 35% women, including 73 female pilots. At our head office, it is 47% women. This has been an important factor in our success, which is why we understand that this is a continuous journey. Though our work does not stop there.

Just a few of our other

initiatives include monitoring and regularly reporting metrics related to DEI on our balance score card and risk reporting held throughout the company. We are the first airline in the world to join the UN Women's Empowerment Principles platform in order to emphasize the role of women in business life and the importance we attach to the principle of equality. We continuously support organisations that focus on gender equality. In 2019, we signed IATA's 25by2025 gender balance pledge to improve female representation in the industry by 25%, or up to a minimum of 25% by 2025. By signing that, we made a commitment to ensure gender balance within our company and by 2022, we had already surpassed our pledge.

The World Economic Forum estimates it will take us 132 years to achieve gender balance, but this should not frustrate us. We all know that this is a long journey; however we should have a relentless focus individually and at a corporate level on this issue, together with proactive policies and with serious intention and action, we will certainly take a step forward.

To achieve this, challenging and changing the existing gender norms needs to be a daily and industry wide effort and a critical component in our goals on culture and leadership



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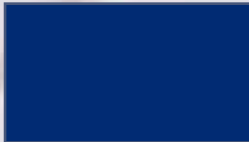
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Interview with Dr. Max Kownatzki,

SunExpress CEO

✈️ Aviation Turkey: First off, thank you for taking the time. You hit around €1.5 billion in revenue in 2022 which is actually higher than pre-pandemic levels. How do you evaluate the numbers for 2022?

Max Kownatzki: Once the pandemic related travel restrictions were lifted, 2022 was a great year with demand increasing significantly. At SunExpress, we not only met the challenge of the time by making it through the pandemic successfully, but also took bold steps towards further growth.

We saw a record-breaking 10.7 million passengers, our highest ever. Our load factor was 85% for the full year, exceeding pre-pandemic levels. We continued our growth in terms of fleet, capacity, and network in response to the increased market demand. We added 8 more aircraft for the summer season and introduced 25 new routes in 2022, the largest network expansion in our history.

The demand for Türkiye remained strong even after the summer season. We leveraged our flexibility and met this demand by ramping up capacity. We added more than 2,000 additional flights from September to December 2022.

As travel ramped up post-pandemic, the industry faced serious operational challenges across Europe last summer. We overcame these challenges with prompt actions and did not cancel have to cancel a single flight due to lack of ground handling staff at our European airports.

All of this contributed to our revenue of €1.5 billion, exceeding pre-pandemic levels and surpassing our profitability targets. Some airlines aim to return to normal levels by 2024, but we are already ahead, operating at 135% of our 2019 ASK. We are in a better position than ever before. And when I say "we", I mean the entire SunExpress family. We pulled together and I'm really proud of my team.

✈️ Aviation Turkey: SunExpress has revealed its biggest network expansion with 26 new routes set for summer 2023. Can you tell us more about the new destinations and your plans for increasing the number of flights in 2023? What can we expect from SunExpress in the near future?

Max Kownatzki: The demand for Türkiye remains strong, especially for the summer season. We are going all out with the largest fleet growth in SunExpress's

history by adding 17 aircraft, instead of 5 planned initially, which will bring our total fleet number to 66 aircraft for the summer.

And with that comes our most ambitious network expansion. We are introducing 26 new routes and 5 new destinations including Bristol, Newcastle, Tbilisi, Venice, and Barcelona. We now offer non-stop flights to 60 destinations in 30 countries, with over 185 routes from Türkiye.

We have also increased our overall seat capacity by 13%, which means we are aiming to carry a record number of over 12 million passengers in 2023, up 22% ASK from 2019.

For the Turkish Riviera this comes with 15 new routes this summer, with flights from Antalya, Izmir, Dalaman and Bodrum-Milas airports to a total of 58 destinations. We are determined to maintain our strong position as the market leader in the Riviera in terms of destinations and frequency.

Our focus on Anatolian cities in Türkiye continues as well. Offering direct scheduled flights from 16 Anatolian cities to 18 cities in Europe. We added 11 new international routes to our Anatolia-Europe flight network this summer.



✈️ Aviation Turkey: Let's talk about Q1/23 and bookings for the Q2/23 and Q3/23. How do you assess the numbers?

Max Kownatzki: In the beginning of 2023, we faced a devastating earthquake that claimed thousands of lives in Türkiye and Syria.

From the very first day of the earthquake, we worked closely with the relevant authorities. We operated

more than 400 special flights to transport search & rescue and medical teams to the region, and to evacuate people affected from the disaster. We flew more than 8,000 search, rescue and medical teams to the region and helped evacuate more than 18,500 people. We also provided free cargo services delivering over 400 tons of aid materials to the affected region.

Additionally, we partnered with DPD, FIEGE, time:matters, CB Customs Broker GmbH, and Lufthansa Cargo to establish an air bridge between Germany and Türkiye. Together, we transported urgently needed relief supplies to the earthquake region, bringing over 1,000 tons of relief goods and around 250 volunteers within a month.

Despite the terrible tragedy, the demand for Türkiye has not substantially changed, apart from minor booking declines for a short period of 10 days. The number of guests we welcomed in the first quarter of this year increased compared to the same period of last year. The strong demand for Türkiye also continues for the summer period, with advanced bookings by international passengers for the second and third quarters up around 15% compared to last year.

Regular travelers are actually booking Türkiye even more this year because travelling here also means supporting the country after the earthquake. As SunExpress, in our role as Türkiye's tourism ambassador, and along with our strong partners, we are continuously encouraging people to visit Türkiye and get more and more people to enjoy this unique and beautiful country.



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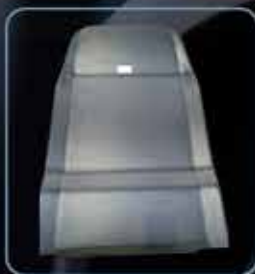
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✈️ Aviation Turkey: Could you give us an update on the SunExpress fleet? What are your plans for new orders and fleet expansion in 2023?

Max Kownatzki: We are growing our fleet in line with our expansion strategy. We operate a pure Boeing 737 fleet which continues to expand every year.

For the upcoming summer season, we will be operating a peak fleet of 66 aircraft. This means eleven additional aircraft compared to last year's base fleet, plus six damp leases. Approximately 20% of our current base fleet are Boeing 737-8s. With 33 additional aircraft on order, we continuously strive to increase this share in the future.

✈️ Aviation Turkey: SunExpress has been named the World's Best Leisure Airline at the prestigious 2022 World Airline Awards. How do you evaluate this achievement?

Max Kownatzki: We always

place our customers at the heart of what we do and strive to provide them with the best possible experience at every touchpoint of every step of this journey, every single day. This achievement at the World Airline Awards, especially after two of the most challenging years for the aviation industry is a testament to our efforts and we are very proud of it.

Receiving this award, based on direct feedback from 14 million passengers, is not only gratifying but also a fantastic recognition of our exceptional team. They represent SunExpress with utmost professionalism, passion, and hospitality day in and day out.

There is a lot of talk about the sense of "togetherness" in companies, but at SunExpress it is truly tangible. We live and breathe this SunExpress family spirit. I've never experienced a spirit like this anywhere else. Let me share an example from one of my first SunExpress flights: An elderly lady gets on the flight and was struggling with her luggage during

boarding. A flight attendant had her sit down in the front, brought her a glass of water, then stowed her luggage and when boarding was completed, walked her to her seat. The flight attendant had no idea that I was nearby, watching her help the passenger. It is just how SunExpress operates. Helpfulness, hospitality, and sincerity are ingrained in the Turkish culture, and when combined with German precision and thoroughness, it creates a wonderful mix.

This award further reinforces our commitment to enhancing customer care making the overall journey more enjoyable. We will continue to listen carefully to our customers and invest in our products and services on the ground and in the air.

✈️ Aviation Turkey: What can you tell us about SunExpress's contribution to Türkiye tourism?

Max Kownatzki: In 2022, SunExpress brought 10.7 million passengers to Türkiye, aiming for 12 million

this year. In addition, we are also putting a lot of effort into growing tourism beyond the summer season. With its rich history, culture, and unique cuisine, Türkiye offers so much more than just summer sun and beach. For the 2022/23 winter season, we have increased our capacity by 35%. We have also introduced 15 new routes for the winter marking the largest route network expansion in our history.

Looking ahead to the 2023/24 winter season, we are actively working on expanding our network even further. Our goal is to make Türkiye a year-round destination, extending tourism beyond sun and beach holidays.

We are committed to contributing to Türkiye's target of attracting 60 million tourists target this year. As Türkiye's tourism ambassador, we are dedicated to promoting Türkiye and Turkish tourism abroad with even more intensity, heart and passion 🇹🇷



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VP Customer of Rolls-Royce Civil Aerospace Matt O'Connor: "Our engines enable airframers to offer the perfect combination of speed, range, size, efficiency, and reliability"

Şebnem Akalın: How would you evaluate the current position of Rolls-Royce in the global commercial aviation sector?

Matt O'Connor: At Rolls-Royce, we believe in the positive, transforming potential of technology.

Our priority for Civil Aerospace is to maximise value from existing capabilities and position the business for the transition to net zero.

In Civil Aerospace, we have a large installed product base of more than 5,700 large engines and around 9,700 business aviation and regional engines. We also have a large order book with more than 1,500 new, large

engines due to be delivered over the next few years, representing a 52% market share and supporting our fleet growth expectations in the medium term.

For the past 25 years, our family of turbofan aircraft engines have continued to push the boundaries of what is possible, as each new model sets new performance benchmarks for civil aviation. All told, they've earned more than 145 million flying hours.

Members of the Trent engine family are now in service on the Airbus A330, A340, A350, and A380, as well as the Boeing 777 and 787 Dreamliner.

We are also seizing new opportunities for growth.

Our Pearl family of business jet engines achieved new successes, with the Pearl 10X chosen by Dassault for its brand-new flagship aircraft, the Falcon 10X, and the Pearl 700 selected by Gulfstream to power its latest ultra-long-range jet, the G800. The introduction of the Airbus A350 freighter created a great opportunity for the Trent XWB engine in a market that has long been dominated by the Boeing 777.

Our engines are hugely competitive in today's market, but to keep pace with ever-changing, global demands, we know our future generation of engines need to be led by constant, thoughtful innovation.

Recently, Rolls-Royce and China Eastern Airlines have signed a TotalCare® Life service agreement for 10 A330 aircraft powered by Trent 700 engines. We also announced a TotalCare service agreement with Philippine Airlines for Rolls-Royce Trent XWB-97 engines that will power nine Airbus A350-1000 aircraft. The first ever net zero transatlantic flight will also take off from the UK next year, with Virgin Atlantic receiving government funding to fly across the pond using solely Sustainable Aviation Fuel (SAF).

We are powering civil aviation all around the world. Recently we received an order from Air India for



the field of civil aviation in the country?

Matt O'Connor: Türkiye is full of opportunities, and we are committed to doing our best to support the country to reach its full potential, as it is a strategic market for us with its diversified order book and strong business volume.

68 Trent XWB-97 engines, plus options for 20 more. This is the biggest ever order for the Trent XWB-97, which exclusively powers the Airbus A350-1000.

Today, our services all around the world offer the flexibility and connectivity required in a globalised world, fly heads of states around the globe, support humanitarian efforts, or connect families by making the world a smaller place. Therefore, our engines enable airframers to offer the perfect combination of speed, range, size, efficiency, and reliability.

Şebnem Akalın: Operating in the country for a long time, Rolls-Royce has made multiple cooperations in Türkiye. In this context, what can you say about the ongoing or future projects you carry out in

In the field of civil aviation in the country, our long-term partnership with Turkish Airlines (THY) started with their selection of Rolls-Royce Trent 700 engines powering Airbus A330s in 2009. Today, THY is operating 26 Rolls-Royce Trent 700 powered Airbus A330s. Additionally, one Rolls-Royce Trent 700 powered Airbus A330 & one Trent 500 powered Airbus A340, and BR730 and Tay powered Gulfstream G450 and G550 Business Jets are being used for VIP operations. We are currently working with Turkish Technic (the Maintenance, Repair & Overhaul arm of THY) to authorize them an Authorised On-wing Service Center (ASC) for Business Jet engines to serve their local and international Gulfstream customers. THY ordered a significant

number of Airbus A350 powered with Trent XWB engines, which entered service in 2020. We are very impressed with THY and its remarkable global market penetration and robust recovery post-pandemic.

Additionally, MNG Airlines operates a fleet of Rolls-Royce Trent 700 powered Airbus A330s.

To help and maintain the operations of our airline customers in Türkiye, Israel and Central Asia, our Airline Support Team based in Turkish Technic's Yeşilköy facilities have been providing on-site support. We hope to continue our partnership with THY as well as our other airline customers in the region by providing our new technologies and services.

At Rolls-Royce, we aim to produce a sustainable business to achieve net zero carbon in our operations by 2030. One of our company's biggest focuses on our net zero journey right now is SAF. In February 2022, Rolls-Royce, Airbus, Safran and Singapore Airlines signed the Global SAF Declaration committing to promote the acceleration of the development, production,

and consumption of SAF. The Global SAF Declaration represents the collaboration between aviation, aerospace, and fuel partners to decarbonise the industry. The Declaration is open to all airlines, as well as aviation and aerospace organisations as a complement to their sustainability commitments. At the Istanbul Airshow in 2022, THY became the newest member of the signatories, which was one of the most important milestones in 2022. THY declared its commitment to help Rolls-Royce and its partners with the widespread and rapid adoption of SAF. This agreement exemplifies the firm momentum that Türkiye has to drive sustainable operations. The next step for us is to determine a joint roadmap and understand the potential cooperation areas around SAF. In a nutshell, we always look for new opportunities and further collaborations to make a positive impact in Türkiye.

Şebnem Akalın: Sustainability has been accelerated all around the globe due to climate change and its effects.



How does Rolls-Royce plan to keep up with this transition? What do you think is needed to decrease the effects of climate change?

Matt O'Connor: Our decarbonisation strategy starts with the emissions in our own operations, extends to our value chain, and ultimately focuses on the contribution we can make to a global transition. We are now laying out our technology pathway to net zero and committing to ensuring our new products will be compatible with the net zero operation by 2030, and all our products compatible by 2050.

We believe there are few companies better placed than Rolls-Royce to lead the way with vital solutions we need to create a net zero future. Our top priority is the development of technical solutions that can directly reduce or remove carbon emissions permanently to leave a healthy planet for the next generations.

Şebnem Akalın: Rolls-Royce is committed to ensuring its products to be compatible with the net zero operation by 2030. Could you please inform our readers about Rolls-Royce's ongoing zero carbon projects?

Matt O'Connor: To combat the climate crisis, we know that power must be made compatible with net zero carbon emissions. For us, this is a societal imperative as well as one of the greatest commercial and technological opportunities of our time. Therefore, our strategy for Civil Aerospace for net zero focuses on improving engine efficiency, enabling the use of SAF, and being at the forefront of developing innovative propulsion technologies. Recently we successfully completed the first tests of UltraFan technology demonstrator at its facility in Derby, UK. The first tests were conducted using 100% SAF.

Additionally, we have partnered with Boeing and World Energy to carry out a

test flight of our 747 Flying Testbed aircraft using 100% SAF on a Trent 1000 engine.

Through our ACCEL (Accelerating the Electrification of Flight) project, we built the world's fastest all-electric plane. Our "Spirit of Innovation" aircraft completed its first flight and reached a top speed of 555.9 km/h (345.4 mph) over 3 kilometres, smashing the existing record by 213.04 km/h (132mph). We have now officially broken two world speed records as verified by the World Air Sports Federation. The aircraft also achieved 532.1km/h (330 mph) over 15 kilometres – 292.8km/h (182 mph) faster than the previous record.

Our electrical power system is also set to power Vertical Aerospace's flagship UAM aircraft. This will be integrated into the piloted all-electric vertical take-off and landing (eVTOL) vehicle, which will carry up to four passengers for 100+ miles at cruise speeds of over 200mph and is on course to certify in 2024. We have also

joined forces with airframer Tecnam and Widerøe, the largest regional airline in Scandinavia, to deliver an all-electric passenger aircraft for the commuter market, targeted to be ready for revenue service in 2026.

In 2022, Rolls-Royce and easyJet confirmed that they have set a new aviation milestone with the world's first run of a modern aero engine on hydrogen. The ground test was conducted on an early concept demonstrator using green hydrogen created by wind and tidal power. It marks a major step towards proving that hydrogen could be a zero carbon aviation fuel of the future and is a key proof point in the decarbonisation strategies of both Rolls-Royce and easyJet.

In line with the commitments that we have also made under the UN Race to Zero campaign, we are aligning our entire business model to the Paris Climate Agreement goals to limit global temperature rise to 1.5°C. This plan will put Rolls-Royce at the forefront of the historic innovation and future growth opportunity that the net zero transition represents.

In conclusion, we manage our business for the long term. We envision technology acquisition and innovation ahead of customer needs. This ongoing commitment to innovation is essential to meeting customers' and society's needs for sustainable power and a greener future 🌱



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What Types of Cabins Can We Expect to Travel in the Future?

As aircraft manufacturers embrace the advancements of emerging technologies, airlines are striving to enhance the comfort and enjoyment of passengers by seeking ways to improve the aircraft they purchase.

Improving the interiors of aircraft is critical for ensuring a pleasant travel experience. As smart cabins become more prevalent, the aviation industry is expected to shift its focus towards the development of a new generation of products that prioritize comfort, sustainability, and hygiene.

Indeed, we are currently witnessing the pinnacle of a new era in aviation innovations, where sustainability has emerged as a crucial factor alongside passenger comfort and technological capabilities.

On what basis are we making these claims?

During the Aircraft Cabin Innovation Summit 2023, held in Hamburg last March and hosted by Airbus,

leaders in the aviation industry gathered to explore the future direction of passenger experience improvements. Significant insights and projections were presented, providing a glimpse into how air travel is expected to evolve in the coming years.

The event also featured the results of a survey conducted by RedCabin, an organization renowned for organizing transportation-focused events. The survey findings shed light on the key areas that require the utmost attention and focus within the aviation industry.

According to the survey "Future of Aircraft Interiors," 78% of respondents highlighted the significance of improving sleeping ability on board. This emphasizes that ensuring passenger comfort during sleep is one of the key priorities in shaping the future of the aviation industry.

In response to the question regarding the area of the aircraft cabin that

necessitates the most physical innovation today, 48% of respondents indicated "seats" as their answer.

According to the survey, 30% of the respondents identified improving comfort as a key aspect to enhance in-flight experiences. Additionally, 17% emphasized the significance of better in-flight connectivity to make the most of the time during travelling. Another 15% of respondents suggested improving communal spaces onboard, while the remaining 20% selected "other" as their preference.

During these times of navigating through the challenging pandemic period and its consequential impacts, upholding hygiene standards onboard emerges as a vital concern for passengers. The survey results unequivocally reflect this reality, with 69% of respondents agreeing that substantial efforts are necessary to ensure cleaner aircraft cabins.



by Muhammed Yilmaz
Aeronautical Engineer

Among the suggestions to improve hygiene onboard, the use of antimicrobial materials was favored by 38% respondents. The second most popular suggestion, supported by 17% of participants, involved the increase of contactless and self-cleaning toilets. Additionally, 15% of respondents emphasized the importance of adopting additional measures to prevent viral contamination.

Sustainability in aircraft cabins is indeed another key topic that the industry needs to prioritize. According to the survey, 65% of respondents believe that there will be significant advancements in terms of sustainability in aircraft cabins within the next 2-5 years.



40% of respondents anticipate an increased use of lighter materials in aircraft cabins, while 30% of survey participants emphasize the significance of developing "green alliances" and collaborations for the strongest sustainability innovations in aircraft cabins.

Let's delve into the technological aspects!

The integration of advanced sensors and IoT technology has significantly contributed to the transformation of airplane cabins into smarter environments. These intelligent systems have the capability to collect and analyze extensive data about the aircraft and its passengers, enabling real-time sharing of valuable insights with relevant parties. Cabin attendants can conveniently access these insights on handheld smart devices, empowering them to take prompt actions based on the information received. Ultimately, it leads to several key benefits including reduced delays, enhanced flight safety, increased passenger satisfaction, and improved operational efficiency.

What can smart aircraft cabins offer us?

The main goal of implementing smart cabin systems on aircraft is to attract new passengers and ensure the loyalty of existing ones. By enhancing the comfort and satisfaction of passengers during their time in the sky, airlines aim to create a positive and enjoyable travel experience. Smart cabin systems enable flight attendants to access real-time data about various aspects of the cabin environment.

For example, tracking the number of occupied seats and identifying the availability and location of alternative empty seats, which can be offered to passengers who wish to change their seating arrangements can be achieved in real-time. Smart cabin technology also enables the monitoring of toilet usage during takeoff or landing, as well as the identification of passengers who may require assistance in this regard.

It also eliminates the need for routine checks conducted by cabin crew, such as ensuring all seats are upright and service tables are closed during takeoff and landing, which are crucial for flight safety.

By utilizing a tablet, cabin crew can easily verify the proper position of trolleys and other equipment in the galley. Within seconds, they can also access information regarding passengers

who have ordered meals with specific preferences, check if these meals have been loaded onto the aircraft and identify the seat assignments of these passengers.

Using handheld devices, flight attendants can check the status of overhead bins, ensuring they are securely closed and see the available space in each bin, all from the comfort of their seats. Furthermore, after landing, they can easily identify if any passengers have left personal belongings in the overhead bins.

Business jet cabins will also become smarter!

The experience of flying by private jet indeed presents unique dynamics, considering the differences in size, occupancy, and comfort compared to commercial passenger aircraft. However, several features of smart cabins that enhance safety and convenience are also applicable for business jets. For example, in both commercial passenger airplanes and business jets, instances of smoke or fire in the cabin and any change in cabin pressure can be detected and reported instantly.

As business jets often do not have cabin crew on board, the cabin is equipped with modern technology to enhance the efficiency and enjoyment of passengers' time in the air. Alongside cosmetic features like temperature and lighting

control, the advanced technology in business jet cabins enables passengers to access various amenities. They can enjoy movies or other entertainment options through the in-flight entertainment system (IFE), which can be accessed via in-flight wireless internet connectivity.

With the continuous advancement of technology, airlines and cabin designers are exploring innovative concepts that could transform the passenger experience. One such concept involves the replacement of traditional aircraft windows with high-definition screens. These screens would be connected to external cameras mounted on the aircraft, capturing panoramic views of the sky and surroundings, thus passengers would be able to enjoy a clear and immersive view of the outside world as they travel.

Smart aircraft cabins are likely to revolutionize the industry and introduce a new era of competition among companies by offering benefits such as minimized delays due to inefficient boarding processes, enhanced cabin safety, improved operational efficiency with real-time access to flight data on a single smart device, alleviated workload and stress on cabin crew, improved passenger experience, and increased passenger loyalty. And as travelers, all we can do is to enjoy every second of the flight 🌟



Hitit CMO Nevra Onursal Karaağaç: "We have 65 partners from 47 countries across six continents"

İbrahim Sünnetçi: Hitit, founded in 1994 by two female engineers who retired from Turkish Airlines (THY) with the desire to develop a technology that would be used worldwide, is now positioned as the 3rd largest airline reservation system (PSS) provider in the world. Can we start our interview by obtaining information about Hitit's journey from the past to the present and its footprint in the Aviation Industry today?

Nevra Onursal Karaağaç: Hitit was founded in 1994 by two female executives who believed that they could develop a much more innovative technology by addressing the shortcomings in the industry based on their extensive experience in the aviation industry. At Hitit, we have solidified our belief in the young and visionary minds and the creativity of this land by establishing a productive and growing team. We provide solution-oriented,

intelligent, reliable, and creative services and solutions for airline and travel industry players who aim for development and change. We position ourselves as a role model to ensure the sustainability of the aviation and travel sectors with smart technologies, and we are proud to be the world's third-largest PSS provider in this field. Looking back at the past, the first major milestone that brought



by İbrahim Sünnetçi

us to this point was our Crane FF solution. In 1999, we developed Crane FF (Frequent Flyer), the first loyalty solution dedicated to aviation, and it became the most widely used solution in the world by 2012. As Hitit gained recognition in the industry with Crane FF,

we continued to expand our range of Crane solutions, providing next-generation technology and software solutions to companies operating in the airline and travel sectors, primarily airlines. By exporting our service-oriented software model to the global market through the systems we developed, Hitit provides technology solutions and services to airlines of all sizes around the world. We cater to various commercial applications of airlines, such as passenger transportation, reservations, ticketing, and check-in, and continue developing new technology and software solutions for the airline and travel sectors. From the smallest to the largest, Hitit serves technology solutions and services to airlines worldwide.

İbrahim Sünnetçi:
How would you define Hitit in its 29th year? In which areas has it made progress? What can you say about the technological achievements you have gained throughout the 29-year journey so far?

Nevra Onursal Karaağaç:
First of all, I would like to mention a wonderful coincidence. As of June 6, which happens to be the last day of the IATA AGM, Hitit has completed its 29th year in a fulfilling manner. We



Nur Gökman, Founder & Nevra Onursal Karaağaç, CMO

are fortunate that what we left behind were not just years, but rather, Hitit has always propelled its industry forward. As a company that courageously takes the necessary technological steps required by the aviation industry, which naturally requires constant development, we take great pride in advancing with the mission and vision we have undertaken.

If Hitit comes to mind when it comes to airline technologies today, if we have been able to create a global brand in this field from our country and open a new high-value export gateway to 47 countries, it means that we have accomplished significant achievements in 29 years. The point we have reached today is the result of a great team and dedication.

Like many members of the Hitit family, I am also delighted to have been a part of this family for many years.

İbrahim Sünnetçi:
Could you inform us about Hitit's current organizational structure, personnel status, financial figures for 2022, and the company's goals and expectations for the end of 2023?

Nevra Onursal Karaağaç:
I mentioned earlier that Hitit is a company founded on local intellectual power. The majority of our employees, approximately 70% of the total workforce, are computer engineers. As of June 2023, we have over 400 employees in our organization. The majority of them work at our headquarters in ITU Teknokent, while some are based in different locations

abroad, predominantly in our offices in Pakistan and the Netherlands. Additionally, through our local representatives on almost every continent, we closely monitor the aviation and travel sectors, considering the demographic conditions and regional dynamics of each area.

As you know, the Covid-19 pandemic deeply impacted the aviation and travel industry. This unprecedented process, which disrupted norms in almost every field worldwide, brought Hitit to a significant threshold. The pandemic years, during which we witnessed the indispensability of technology, once again highlighted the necessity of digital transformation and propelled the growth of Hitit in parallel. There have been significant

INTERVIEW



differences in our numbers before and after the pandemic. Our partner count tripled, and our employee count doubled, and it continues to increase. This upward trend, combined with our initial public offering in March 2022, has taken Hitit to a completely different level.

In 2022, we managed to increase our revenue by 30% to \$18.8 million and raise our EBITDA margin to 43%. As for 2023, in the first quarter, we increased our revenues by 67% compared to the same period last year, reaching \$6.3 million. Based on this progress, we anticipate closing the year 2023 with high performance surpassing the previous year.

İbrahim Sünnetçi: As Hitit has been listed on Borsa İstanbul (BIST) since March 2022, could you tell us about the current

ownership structure of the company? What percentage of the company's shares are publicly traded?

Nevra Onursal Karaağaç: Approximately 27% of Hitit's shares have been offered to the public and are traded on the stock exchange. The remaining 50% is owned by the initial founding partners, and the remaining 50% is owned by Pegasus Airlines Inc.

İbrahim Sünnetçi: As Hitit is one of the signatories of the International Air Transport Association's (IATA) "25by2025" project, which aims to increase the representation of women in the aviation industry to at least 25% by 2025, could you enlighten our readers about the employee profile at Hitit? Can we obtain information about the company's approach to

gender diversity and the gender ratio among its employees?

Nevra Onursal Karaağaç: Both aviation and technology have traditionally had low female employment rates. Especially considering the year of its founding in 1994, the representation of women in Hitit was initially quite low. However, as a company founded by two female entrepreneurs and now among the world's leading companies, Hitit has maintained gender diversity for 29 years. Within our company, 50% of the Board of Directors, 65% of the senior management, and 37% of the employees are women. Additionally, we have the highest proportion of female executives among the publicly traded software companies in Türkiye. As a firm operating at the intersection of technology and aviation, where male-

dominated employment structures are common, we believe we are an exemplary company surpassing general criteria in achieving gender balance. The underlying principles of our human resources practices that contribute to this success can be summarized as follows: At Hitit, we create equal opportunities and do not make gender distinctions for all roles. Furthermore, we do not tolerate any form of gender pay gap, which is often encountered in the real sector for both female and male employees. We implement equal pay for equal work policy. Additionally, our flexible working arrangements on a voluntary basis create significant advantages, particularly for working mothers, allowing them to continue their careers without sacrificing their personal lives.

We acknowledge the gender gap in technology-related careers and are taking concrete steps to bridge this gap. Through our social responsibility projects, we actively work to reduce gender inequalities in information technology and STEM. We encourage women to pursue careers in aviation technology and STEM by providing education, mentorship, and scholarship opportunities and supporting young women in internship

programs. Our efforts aim to create a more inclusive and equitable industry that reflects the diversity of the communities we serve.

As a member of the Women in Technology Association (wTech), we actively participate in their initiatives. As part of this collaboration, we have become the Education Sponsor for the "Leading Women in Technology" program. Within the framework of this program, we will provide technology education to young women in various cities across Türkiye until June 2023.

İbrahim Sünnetçi: As the first civil aviation technology company in Türkiye, Hitit currently provides software exports as services to 65 partners in 47 countries across 6 continents. Could you tell us about the main products and services that Hitit offers to its customers (partners)? Can you provide information about your user profile/portfolio worldwide?

Nevra Onursal Karaağaç: As you mentioned, we currently have 65 partners from 47 countries across six continents. While a significant portion of our partners are airline companies, we also provide our software solutions to various companies in the travel



industry. However, our main focus at the moment is aviation, particularly with our core offering being the frequent flyer software that serves the comprehensive needs of an airline. We develop next-generation technology and software solutions primarily in the software-as-a-service (SAAS) model, catering to companies operating in the airline and travel sectors.

With our Crane branded solutions, we offer end-to-end comprehensive airline management technology that covers a wide range of services, including reservation, ticketing, check-in, departure control system crew planning, loyalty management, revenue-cost accounting, schedule planning, operational control, tour

operator/allotment mobile application, and air cargo requirements.

In addition, our software solutions, Agent Portal Plus (Crane APP) and Crane OTA (Online Travel Agencies) are designed specifically for travel agencies and tour operators, offering essential functionalities such as reservation, ticketing, ancillary service sales, and passenger services. Apart from common functions such as selling multiple airlines and travel products (e.g., hotels, transfers, car rentals), we continuously enhance our products to address the shortcomings in indirect sales channels and provide an equivalent range of products and services through direct sales channels. In summary, we also collaborate with travel

agencies. Furthermore, our system is adaptable to the needs of the maritime and railway industries. We can also work with sea and rail transport companies with our flexible systems and preliminary work.

İbrahim Sünnetçi: Can you tell us about the scope and significance of the contract you signed with the AnadoluJet on February 23, 2023, for the use of the "Crane PSS" Passenger Service System (PSS)?

Nevra Onursal Karaağaç: The agreement with AnadoluJet was a significant milestone for Hitit in the first quarter of 2023. Our teams have started working, and a transition period is being planned based on the dynamics of AnadoluJet. After completing the integration process, AnadoluJet will fly with

INTERVIEW



Hitit technology for five years. Working with Turkish Airlines, one of Türkiye's and one of the world's most important airline companies, is a source of great pride for us. The fact that our national flag carrier trusts Hitit technologies is the biggest testament to how well we do our job. The collaboration between domestic brands is also a win-win situation for our country.

İbrahim Sünnetçi: Could you inform us about your software solutions specifically designed for air cargo operations, which have gained importance and seen increased operations, becoming a critical source of revenue for airlines, especially during the COVID-19 pandemic?

Nevra Onursal Karağaç: Aviation is now about more than just scheduled flights; we have left those times behind. Especially with the pandemic, cargo has become an important player in the aviation industry and is ready to embrace digital technologies. Since 2019, Hitit has added cargo technologies to our software solutions with the "one-stop shop" approach, offering comprehensive services. With our compatible, modular, and scalable software solutions called Crane CGO (Reservation and Cargo Services) and Crane DOM (Local Cargo Services), Hitit is poised to become one of the strongest global brands in the digital transformation of air cargo.

When we initially launched

our solutions, we offered them in addition to the flagship reservation and ticketing systems. In time, they evolved to become marketable and capable of competing independently. A similar journey is taking place for our cargo solution, and the development efforts for cargo solutions have gained momentum after the initial public offering. Developing our cargo solutions in the accounting field has also been completed. Hitit will become more prominent in the cargo sector in the coming period.

İbrahim Sünnetçi: Hitit allocated US\$6.4 million for R&D by the end of the fourth quarter of 2022, and the company made an R&D investment of US\$2.1 million by the end of the first quarter of 2023. Could you enlighten

us about the company's perspective on R&D, the number of engineers involved in R&D activities, and the ongoing major R&D initiatives? In which specific areas does the company invest in R&D?

Nevra Onursal Karağaç: We have identified three areas, namely "enhanced customer experience," "operational excellence," and "revenue-enhancing activities," as the focus of our R&D investments. We are directing our efforts accordingly. We are actively working on increasing collaborations with leading cloud infrastructure providers worldwide, and these efforts are progressing rapidly. So far, we have made improvements to our products in terms of optimization algorithms, which our partners have effectively utilized. We are now transferring this experience to the field of artificial intelligence. We are diversifying and continuing our investments in the field of artificial intelligence.

İbrahim Sünnetçi: Could you share your thoughts on Hitit's competitive strength in both domestic and international markets? What are the distinguishing features and advantages of Hitit and its software solutions compared to its competitors in the market?

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Nevra Onursal Karağaç:

Entering and even making a name in the global airline technology market was initially very challenging for a software company emerging from Türkiye. However, as I mentioned earlier, the success of Crane FF becoming the most widely used loyalty program in 2012, followed by a similar achievement in reservation and ticketing systems, also known as airlines' ERP, propelled Hitit to the forefront of competition. In short, the perception of Turkish software companies in global markets has shifted in a positive direction, and Hitit has made significant contributions to this success. The success of our software solutions, combined with our business development and product strategies, has led us to create a comprehensive software solution family that embraces the aviation and travel sectors. Our "Crane" software solutions are diverse and capable of meeting all the needs of an airline from A to Z. We are the only airline technology company in the world that provides this diversity from a single point.

Additionally, during the pandemic, we surpassed our closest and largest international competitors in terms of growth rate.

While our biggest competitors grew by an average of around 2-3% in 2020-2021, Hitit achieved growth rates of 50% in 2020 and 36% in 2021.

 **Ibrahim Sünnetçi:** *As a global player that operates with a sense of social responsibility towards society, could you provide information about the social responsibility and sustainability projects that Hitit has implemented in the last five years and is currently working on?*

Nevra Onursal Karağaç: We are actively working towards a more sustainable future in aviation with our commitment to sustainability, innovation, and social responsibility.

We continue our efforts in line with the set goals to address the environmental impacts of the aviation industry and reduce emissions. In this regard, we have initiated the FlyNet Zero project by IATA, which aims for net-zero carbon emissions for airlines by 2050. At Hitit, we understand the importance of coordinated efforts across the entire aviation industry in achieving these sustainability goals, and therefore, our innovative solutions play a crucial role in supporting these efforts.

We believe that accurately calculating and monitoring carbon emissions is crucial. In this context, our Cost Accounting (Crane CA) solution includes carbon emissions tracking and optimization functions developed in accordance with the International Civil Aviation Organization (ICAO) guidelines for Carbon Offsetting and Reduction Scheme for International Aviation (CORSA). Our partners can accurately predict emissions from their operations through these specified functions and determine optimal fleet/ aircraft assignments, route plans, and fares to minimize emissions. This enables airlines to reduce their environmental footprint, contribute to a better environment, and take proactive measures to support the aviation industry's sustainability commitment.

However, our contribution to sustainability in aviation goes beyond just emission tracking. Social sustainability and our corporate responsibility approach are also critical aspects. At Hitit, we conduct our operations to benefit society in line with the United Nations Sustainable Development Goals (SDGs). We provide support and implement projects not only in our own country but also

in regions where our partners are located worldwide. We generate projects in various areas, such as the environment, sports, education, and gender equality. In 2018, we launched "Rockets Up" Türkiye's first sustainable social responsibility project in table tennis. With a mission to popularize table tennis and introduce young people to a healthy lifestyle and sports, we collaborate with the Turkish Table Tennis Federation. So far, we have provided table tennis coaching to 370 teachers from 355 schools in 5 cities, and 140,000 students have been introduced to table tennis.

With the project, we identified needy schools in the cities, districts, and villages and provided table tennis equipment. The coaches are volunteer teachers who undergo professional training and receive coaching certification from the Turkish Table Tennis Federation. The education process for students begins under the guidance of these certified teachers. One of the most important goals of the project is to discover and support young talents in table tennis and to produce athletes who will represent our country in this field at the global level 🌐




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Istanbul Sabiha Gökçen Airport Celebrates Women in Leadership

As befitting its namesake, Istanbul Sabiha Gökçen (ISG) International Airport continues to shine a light on female leadership and achievements by promoting gender diversity and inclusiveness at its workplace. The airport was named after Sabiha Gökçen, the world's first female air force combat pilot who had first flown a fighter plane back in 1937. One of the adopted daughters of Mustafa Kemal Atatürk, founder and the first President of Türkiye, she continues to be an inspiration to many women within the aviation industry.

Nearly a century has passed since Sabiha Gökçen's impressive feat and while more women hold prominent roles in aviation today, female representation within the industry is still very low especially in leadership and senior management positions at both airlines and airports. It has been reported that prior to the COVID-19 pandemic,

global data shows that only 3% of airline CEOs were women while 8% and 3% held CFO and COO posts respectively.

It is both refreshing and commendable that the ratio of women in leadership positions at ISG bucks this trend. The airport, which is part of the Malaysia Airports Group, greatly values the contribution and expertise that women bring to the business.

Berk Albayrak, Chief

Executive Officer (CEO) of ISG says "Together with its parent group, the airport does not only focus on excellence in airport operations, but puts equal emphasis on diversity, equality and inclusiveness within its workforce."

ISG is proud to feature its women leaders who hold various critical roles such as finance, human resources, legal, information technology and communications in what is still perceived as a male-dominated space.

It's time for more female leadership in the Aviation Industry

Albayrak continues to say that he is proud to helm such a progressive team and advocates more efforts towards breaking the glass ceiling, "ISG should be held up as an example within the industry. 50% of ISG's management consist of women – this is something to be proud of especially when you compare that only about 10% of top management



positions among 500 member airports of ACI EUROPE are held by women.”

United Nations (UN) has included gender equality among its Sustainable Development Goals, as gender equality is “not only a fundamental human right, but a necessary foundation for a peaceful, prosperous and sustainable world”. While it is important to challenge the male-dominated power structure, men, especially those in decision-making positions, do have a role to play in supporting women, recognising female talent, empowering more women and breaking the walls of gender disparity together.

Ceyda Şems, HR Director

“I am delighted to be part of such a diverse and dynamic team here at ISG. After several years in the airline industry, I joined ISG as its HR Director. I urge young professionals to go outside of their comfort zone and explore different areas and places to work. Indeed this is how you grow and make a difference or leave a mark.”

Ismihan Baysal Anderson, IT Director

“We have a very supportive senior management team who welcome the valuable insights brought to the table by its female peers. ISG as a whole, is committed to improving gender parity especially in senior roles. Women can

play a strong role in airport operations with attention to detail, multitasking and communication competencies in their nature. This is exactly what we have at ISG.”

A seamless airport journey with innovative technology

Through ISG’s continuous efforts in improving its services and technology infrastructure, the airport has won the hearts of consumers and was recognised as a leading brand in the airport category by winning the ‘Most Technological Brand’ award by Tech Brand Türkiye, as well as the ‘Digital Airport of the Year’ by Bluesky Awards 2022.

Among the latest innovations at ISG is the new chip ID card system that allows Turkish passengers to breeze through their boarding gates. The system ensures a fast and smooth passenger journey without compromising security as all movements are monitored through an image processing system with artificial intelligence. Coupled with the e-passport system, Turkish citizens over the age of 18 with chip-embedded passports can scan their passports at e-passport counters for a fast and easy journey through passport control.

To further enhance the airport guests’ experience, ISG has a mobile app that



enables passengers to check in their flights, track and view flight status, wayfinding through the airport as well as information about new deals, campaigns and promotions happening at the airport, alongside Türkiye’s first airport loyalty program, ISG Portpal.

A convenient, time-saving and passenger friendly city airport

Türkiye’s 2nd largest airport, ISG has emerged stronger from the pandemic and was ranked the 9th busiest airport in Europe

for hosting more than 30.8 million passengers in 2022. With a built-up area of 320,000 square meters, ISG is equipped with a vast parking lot, a duty-free area, and numerous check-in counters to ensure a smooth and joyful journey from the curbside to the boarding gate for our valued guests.

Serving one of Europe’s most populous cities, Istanbul, ISG takes pride in its connectivity to the city with a population of close to 16 million people via two major highways and a metro line, bridging the distance between Pendik (12 KM), Kadıköy (31 KM), and Taksim (40 KM) ➔





AnadoluJet Offers a Comfortable and Affordable Travel Experience

AnadoluJet, the successful and rapidly developing trademark of Turkish Airlines, was established in 2008 to meet the air transportation needs of Anatolia with much more advantageous options.

Nowadays it has 80 aircraft in its fleet, 31 different country with 92 destinations on international flights, and 170 routes. Serving Europe, Asia, Middle East, Africa and Türkiye with new destinations. AnadoluJet plans to increase the

number of its flight destinations and countries in the future with young and dynamic fleet.

AnadoluJet, which started international flights as of June 11, 2020, has direct flights to many not only domestic but also international destinations from Istanbul Sabiha Gokcen Airport, Ankara Esenboga Airport and also Antalya, Bodrum and Dalaman.

AnadoluJet, which operates its flights with

the experienced cabin and cockpit crew members of Turkish Airlines, will continue to serve in a wide flight network as the successful trademark of the flag carrier airline. It is a trade mark of Turkish Airlines.

AnadoluJet offers its valuable guests a comfortable and affordable travel experience with complimentary treats, baggage services and car rental facilities. Adding value to the developing technology with its

innovative approach, our brand continues to increase its service quality with opportunities such as "Extra Seat Selection" and "Meal Selection".

Along with these, it aims to reduce carbon emissions by developing environmentally friendly Technologies and innovations. In the next ten years, it aims to become a global airline company by further expanding its flight destinations and also providing much more affordable flights to its precious passengers.




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KEYVAN
AVIATION

myTECHNIC: Centrally Located in the Heart of Aviation

myTECHNIC has started its operations in 2008. Its name was chosen to emphasize its purely third-party business plan, putting the customer airline in priority. Its full capacity is dedicated to the customers.

As world's first Lean Greenfield MRO, myTECHNIC is located at Sabiha Gokcen International Airport (SAW) on the Asian side of Istanbul, Turkey. This advantageous geographical location between Europe and Asia makes myTECHNIC ideally suited to serve domestic partners as well as global carriers in Europe, CIS, Middle East, and Africa.

Designed on the principles of Lean Management, myTECHNIC accomplishes time saving and effective MRO service options ranging from airframe maintenance to engine & component overhaul and to aircraft painting.

myTECHNIC can give support for additional services such as structural & composite inspections and repairs, modifications, access to spares, cabin interior maintenance services.

myTECHNIC is approved by Turkish Civil Aviation



Authority (DGCA) and received its EASA Part 145 Approval Certificate in 2008. myTECHNIC holds several civil aviation authority approvals including FAA (USA), UK CAA, CAAC (China), Bermuda DCA and many others.

State-of-the art facility

•The largest third-party MRO facility in Turkey

with a total closed area of 48,400 m² and one of its kind in the region with a 15,788 m² hangar area, 12,115 m² office area and 20,500 m² warehouse and shop area under one roof.

- Engine MRO
- Strong Component Shops
- World's first LEAN Greenfield MRO, where the lean approach is infused into every

aspect: from the design and layout of the facility to the organizational structure and throughout the operation.

Cost effective and transparent

Since foundation in 2008, Lean Management principles have nested best practices of productivity and safety, eliminating waste of space, movement and time in myTECHNIC. It is continuously worked on extending corporate responsibility areas for environment, increasing satisfaction, minimizing costs and turnaround time for partners. The flexible hangar management concept ensures that there is sufficient buffer to compensate non-routine findings with pre-given TAT.



A new goal: convenience

Starting from the top management, the company culture is well-aware of the importance of customer experience. There are less barriers and more flexibility, thanks to this decade long journey of more than 100 different airlines and lessors. The goal is common, to redeliver keeping the 3 pillars of quality, TAT and price up and strong. But working on projects from more than 50 different countries brought a new goal: the convenience.

Customers of myTECHNIC experience nothing but convenience. Between the ferry flights, at the hotel, at our customer centric facilities, a flexible MRO management system which provide full visibility until the very end of the project bring this convenience. The unique and primary attribute in this “anyone’s” MRO facility.

Being part of a third-party MRO, our teams are very well-aware and concerned about customer satisfaction and transparent information flow. From the contracting phase, until the end of contract, a dedicated team is assigned to our customers to follow the best practices in project management.

A very experienced

structural team, integrated paint facilities brought a great advantage especially during heavy and end of lease checks. The interior performance and new capabilities towards the perfect cabin are improving every day. Even though Part-21 and DOA approvals are not in place, the outsourcing of such capabilities when needed works perfectly.

The motto is simple. We treat the most important asset of the airline as if they are our own. And we imagine ourselves earning our wages not by man-hours, but the tickets sold and timely and reliable flights made. And most of all, we learn from our mistakes and maintain a company-wide culture of open communication. It needs some fortitude to act as such, but our returning customers greatly pay back. We are keen to offer not only a proposal of services, but myTECHNIC becoming the MRO Partner.



myTECHNIC Component Shops

- Compressed Cylinder and Regulator (Hydrostatic) Shop (hydrostatic testing, maintenance, repair and overhaul of compressed

gas cylinders such as but not limited to: slide bottles, oxygen bottles, fire extinguishers (Halon 1211, 1301))

- Hydraulic Shop (inspection, repair and overhaul for the hydraulic components such as fuse, swivel, valve, actuators)



Base Maintenance Services

RATING	LIMITATION	SCOPE
A1	Airbus A300 Basic Model	• All level scheduled checks (A, C and D)
A1	Airbus A300-600	• Heavy structural repairs (sheet metal and composites)
A1	Airbus A310	• Heavy modifications, including avionics
A1	Airbus A318/319/320/321	• Minor or major modifications/alterations and minor/major structural repairs
A1	Airbus A319/320/321 Neo	• NDT (Ultrasonic, Eddy-Current, X-RAY, MPI, FPI, Thermography)
A1	Boeing 737-300/400/500	• Cabin interior replacements
A1	Boeing 737-600/700/800/900	• Cabin reconfigurations/refurbishments
A1	Boeing 737-7/8/9 (Max)	• CPCP applications and ageing aircraft program requirements
A1	Boeing 747-400	• Full airframe repainting
A1	Boeing 757-200/300	• Redelivery checks, end-of-lease checks, bridging checks
A1	Boeing 767-200/300/400	
A1	Boeing 777-200/300	

Line Maintenance Services

RATING	LIMITATION	SAW	AYT	SCOPE
A1	Airbus A300 Basic Model	YES	NO	Line maintenance checks (up to and including A checks) SAW: Sabiha Gökçen International Airport AYT: Antalya International Airport
A1	Airbus A300-600	YES	NO	
A1	Airbus A310	YES	NO	
A1	Airbus A318/319/320/321	YES	YES	
A1	Airbus A319/320/321 Neo	YES	NO	
A1	Airbus A330	NO	YES	
A1	Boeing 737-300/400/500	YES	NO	
A1	Boeing 737-600/700/800/900	YES	YES	
A1	Boeing 737-7/8/9 (Max)	YES	YES	
A1	Boeing 747-400	YES	NO	
A1	Boeing 757-200/300	YES	YES	
A1	Boeing 767-200/300/400	YES	YES	
A1	Boeing 777-200/300	YES	YES	

Engine Maintenance

RATING	LIMITATION	SCOPE
B1	GE CF6-50 Series	• Top-Case repairs
B1	GE CF6-80C Series	• CRF Oil Leak repairs
B1	CFMI CFM56-7B Series	• HPT repairs
		• Modular replacements
		• AD-SB applications
		• Performance restorations (HSI)
		• Full Overhaul

Component Maintenance

RATING	ATA	SCOPE
C1	Air Cond & Press	Component in accordance with Component Maintenance Capability List (CMCL)
C3	Comms & Nav	
C4	Doors & Hatches	
C5	Electrical Power	
C6	Equipment	
C7	Engine & APU	
C8	Flight Controls	
C12	Hydraulic Power	
C14	Landing Gear	
C15	Oxygen	
C17	Pneumatic	
C18	Protection Ice/Rain/Fire	
C20	Structural	

• **Emergency Equipment Shop** (maintenance, repair and overhaul for escape slides, life rafts and life vests)

• **Wheel and Brake Shop** (inspect, test, repair and overhaul of various types of wheels (nose and main) and brakes (carbon and steel) which require frequent maintenance and replacement services)

• **Electrical and Electronical Shop** (maintenance, repair and overhaul of the aircraft avionic components such as temperature sensors, thermal switches, headphones/headsets, BUS protection panels, main batteries, battery chargers, coffee makers, hot cups, megaphones, ELTs, smoke detectors, ballast, battery power supplies, ovens, ILS control panels, audio selector panels, strobe lights, logo lights, GCU, etc.)

• **Cabin Interior** (cabin interior repair on furnishing, lining, galley & toilets, sews carpets, dress covers, etc.)

• **Tailor Shop** (overlocking and sewing of the carpets, curtains, headrest covers, etc.)

• **Coating Shop** (coating of a wide range of aerospace parts such as but not limited to: sidewall panels, ceiling panels, etc. Heat and Vacuum Applicators (HVA) machines are used)

• **Structural and Composite Repair Shop** (equipped with bending, cutting, drilling machines)

• **Painting and Cleaning Shop**

Specialised Services Maintenance

• Non-Destructive Testing (NDT) Services

- myTECHNIC NDT Shop is ASNT Corporate Partner
- NDT inspections all around the world with latest technological control devices and NDT NDT Level III consulting services

ASIRLARA
BEDEL 50
50 YEARS WORTH
CENTURIES *years*



T625 GÖKBEY

GENEL MAKSAT HELİKOPTERİ
MULTIROLE UTILITY HELICOPTER



- *Technical support in six NDT methods with Level II & III specialists*

- EDDY CURRENT
- ULTRASONIC
- RADIOGRAPHY
- THERMOGRAPHY
- FLUORESCENT PENETRANT
- MAGNETIC PARTICULE

• **Welding Services**

• **Borescope Inspections**

• **Tap Test (Coin Tapping)**

• **Painting Services**

- Full aircraft painting including livery application with both paint removal options, rub down (sand) or chemical stripping
- Industry standards and best practices are followed and the highest quality painting standards available today are ensured
- Experienced with all leading paint system manufacturers' paint systems such as solid based, base coat/clear coat and mica series
- High gloss and low orange peel performance criteria are reached at every project Bare metal inspections are carried out with immediate action with less influence on the target TAT

• **Structural and Composite Repairs**

- All SRM and OEM radome repairs with hot bonder (EASA Form One can be issued)
- Fuselage skin replacement (If requires aircraft can be supported in a jig position)
- All SRM or OEM slat, flap, spoiler, etc. structural and composite (with hot bonder) repairs (EASA Form One can be issued)
- Vapor Barrier composite and structural repairs

- Repair or manufacturing (from raw material) of the composite floor panels
- Flight Compartment Window Number #1 and #3 Frame Cracking repairs (SB 737-53-1303, SB 737-53-1330, SB 737-53-1336, SB 737-53-1345)
- FWD and AFT cargo door outer skin replacement
- Seat track SRM or OEM repairs
- Stone chip damages evaluations and doubler repairs if required
- Horizontal stabilizer lower skin crack repairs
- FWD and AFT cargo compartment Zee channel side plate replacement
- Pylon Strut modification
- Keel Beam crack repairs
- Rib 5 corrosion repairs
- Winglet modifications and repairs
- Fail Safe Strap modifications
- **Cabin Modifications**
 - Reconfiguration of the cabin of Boeing 777-300ER aircraft from 38J/274Y to 540Y configuration
 - Reconfiguration from 282 two-class



passenger to a common 336 single-class passenger configuration

- Removal of galleys, closets, VCC (Video Control Center)

- Opening-up new windows after removals
- Installation of sidewalls and overhead bins
- Changing the layout and adding new seats

- Adjusting Emergency Path Light, NTF and carpet for the new layout
- Adding DCPS (DC Power Supply), OEU (Overhead Electronics Unit) and PSU (Passenger Service Unit) for new seats and adjusting IFE (In-Flight Entertainment System) accordingly
- **Avionic Modifications**
 - Wifi Modification
 - AFIRS (Automated Flight Information Reporting System) Modification
 - Electronic Flight Bag (EFB) Installation
 - Zonal Dryer Modification
 - Inflight Entertainment System Installation
 - MRR/ILS Modification
 - CPDLC Modification
 - ADS-B Out Modification

Training Services

TRAININGS	TYPES	SCOPE
Aircraft Type Theoretical Training	Boeing 737-600/700/800/900 (CFM56) B1.1, B2, B1.1 & B2, C	TR-DGCA SHY-147 (TR.147.0006) and EASA Part-147 (EASA.147.0149) approved training organisation
Aircraft Type Practical Training	Boeing 737-600/700/800/900 (CFM56) B1.1, B2 and B1.1 & B2	
Aircraft On-the-Job Trainings	Boeing 737-300/400/500 (CFM56) B1.1, B2 Boeing 737-600/700/800/900 (CFM56) B1.1, B2 Airbus A318/A319/A320/A321 (CFM56) B1.1, B2 Airbus A319/A320/A321 (V2500) B1.1, B2 Boeing 757-200/300 (PW2000 & RR RB211) B1.1, B2	
Part-145 Trainings	Aviation Legislation (law Module-10) Aviation Maintenance Human Factors (law Module-9) Aircraft Fuel Tank Safety (Phase-2) EWIS (TG1-2) SMS Receiving Inspection Package Training (ATA Spec 300, ESDS, HDI, DGR Awareness)	In-house and international maintenance and type courses for its technical staff as well as customers
Specialized Trainings	Engine Run-up Borescope Aircraft Corrosion ATA Spec 300 Electrostatic Sensitive Devices Hidden Damage Inspection Technical Changes	Aircraft General Aircraft Cleaning Aircraft Painting Aircraft Pushback Train The Trainer Train The Assessor Train The Examiner

The Year of Air Serbia's Expansion



On 8 May 2023, Air Serbia carried more than 1,000,000 passengers whereas in 2022 this significant achievement was only reached on 8 July, two months later. In the so far most successful pre-pandemic year 2019, the Serbian national airline reached the number of one million passengers on 25 June, i.e., a month and a half later compared to the current year. Bearing in mind the existing trends, Air Serbia expects to exceed the figure of three and a half million passengers carried in 2023.

"We knew this outcome was to be expected when we registered our 500,000th passenger in 2023 in mid-March, and we anticipated more success and soon. Just two months later, we are breaking our records again. For the first time since we have

been operating under the name of Air Serbia, we have already handled one million passengers in May. We have reason to be satisfied with outstanding monthly results with ten consecutive record months in terms of the number of flights and passengers carried, and a profitable first quarter of 2023. The achieved results motivate us to be even better and more efficient in the coming period," said Jiri Marek, CEO of Air Serbia.

Air Serbia Summer Schedule

In the summer season, Air Serbia operates scheduled and seasonal flights to more than 80 destinations across the world, 20 of which are destinations Air Serbia did not fly to in 2022. Air Serbia's network is strengthened with more

than 20 destinations, such as Budapest, Tel Aviv, Ankara, Catania, Izmir, Lisbon, Cairo, Hamburg, Gothenburg, Cologne, Naples, Marseille, Florence, Heraklion, Krakow, Varna, Ohrid, Crete, Rhodes, Palermo, and Chania.

The most frequent Air Serbia destination during the summer flight schedule are Tivat with 40 weekly flights, followed by Podgorica, Zurich and Istanbul with 21 flights,

Vienna with 18, Budapest with 17, i.e. Athens, Larnaca, Ljubljana, Paris, Skopje, Tirana and Zagreb with 14 weekly flights. Among the most frequent destinations of the Serbian national airline are Rome with 12 flights per week, Prague with 11, Amsterdam and Milan with 10. Nine times a week, Air Serbia will fly to Barcelona, Bucharest, London and Sofia, while the national airline will fly to Berlin and Thessaloniki eight times a week.



From Belgrade Directly to Chicago O'hare International Airport

In addition to New York, which Air Serbia has been flying to for nearly seven years, on 17 May 2023 Air Serbia launched direct flights between Belgrade and Chicago (O'Hare International Airport - ORD) after more than a 30-year hiatus. Until 11 June, flights will be operated twice a week, on Wednesdays and Saturdays, while as of 12 June, Belgrade-Chicago flights will be operated three times a week, on Mondays, Wednesdays and Saturdays.

By launching flights between Belgrade and Chicago, Air Serbia enables good connections from the "Windy City" for its passengers, via Belgrade, to a large number of attractive destinations in its growing network.

By increasing the number of flights between Belgrade and New York to 7 weekly flights and by commencing flights to Chicago, during the summer season the Serbian national airline will offer up to 10 weekly flights between the capital of Serbia and North America.

Air Serbia & Turkish Airlines Codeshare Cooperation

Recently, the national airlines of Serbia and Turkey, Air Serbia and Turkish Airlines, have expanded their codeshare partnership by adding marketing codes on flights to additional destinations within their networks. By introducing direct flights between Belgrade and Izmir, both airlines have added their codes on additional flights to Turkey, including Turkish Airlines' marketing code on Air Serbia's new direct route between Belgrade

and Ankara. The Serbian national airline has added its "JU" code on Turkish Airlines flights between Istanbul and Sao Paulo, thus allowing for the first time the presence of Air Serbia's marketing code in the South American market, as well as on Turkish Airlines flights from Istanbul to Almaty and Abu Dhabi. The national airline of Turkey has placed its "TK" code on Air Serbia flights to Ohrid in North Macedonia.

The Serbian and Turkish national airlines have already expanded their existing cooperation in the field of codeshare agreements several times. Thanks to the partnership between Air Serbia and Turkish Airlines, Istanbul, the largest city in Turkey and a global transportation hub, is accessible via flights from Belgrade, while passengers flying from Istanbul via Belgrade have the best possible connectivity to the wider Balkan region.



Jiri Marek - Air Serbia CEO

Air Serbia is the proud successor of the first national airline Aeroput, established on 17 June 1927, and of JAT and Jat Airways. The company ranks eighth on the list of the oldest airlines in the world that are still operating. Air Serbia has been among the leaders of civil aviation from the start and since 1961 a member of the International Air Transport Association (IATA). Air Serbia has been operating since 26 October 2013 under its current name and with a new name and new identity.

In passenger and cargo traffic, Air Serbia serves over 80 destinations in scheduled and charter traffic in Europe, the Mediterranean, North America, Asia, and Africa.

In addition to the Belgrade Nikola Tesla Airport, Air Serbia also flies from Niš Constantine the Great Airport, and the international airport "Morava" near Kraljevo.



Boeing, İstanbul Technical University & Turkish Airlines Signed the Türkiye Sustainable Aviation Platform!

The opening ceremony of the Türkiye Sustainable Aviation Platform, established in collaboration between Turkish Airlines (THY), Boeing Turkey, and İstanbul Technical University (İTÜ), took place on Wednesday, May 31, at 'The Grand Tarabya Hotel' with the participation of stakeholders from the Turkish Aviation Sector.

The opening speeches of the event were delivered by Ayşem Sargın, Managing Director and Country Executive for Boeing Turkey; Prof. Dr. Lütfiye Durak Ata, Vice Rector of İstanbul Technical University (İTÜ); and Levent Konukcu, Chief Investment & Technology Officer at Turkish Airlines (THY), in the presence of Julie A. EADEH, the U.S. Consul General in İstanbul, and Prof. Dr. İsmail Koyuncu, the Rector of İstanbul Technical University. Brian Moran, Vice President of Boeing's Global Sustainability Policy & Partnerships, who was the keynote speaker of the ceremony, delivered a comprehensive presentation on Boeing's ongoing efforts in aviation sustainability and the company's vision

and goals for 2050 in this field. Following the opening speeches, the signing ceremony for the Türkiye Sustainable Aviation Platform took place with the participation of Ayşem Sargın, Managing Director and Country Executive for Boeing Turkey; Prof. Dr. Lütfiye Durak Ata, Vice Rector of İTÜ; and Levent Konukcu, Chief Investment & Technology Officer at THY.

During the Signing Ceremony on behalf of Boeing, THY, and İTÜ, who share a desire to develop an alliance of aviation stakeholders in Türkiye with an aim to work towards a vision of collaborating to create impact for a more sustainable aviation industry, the 'Türkiye

Aviation Sustainability Alliance Signing Certificate' is inked by Sargın, Konukcu, and Ata. According to the 'Türkiye Aviation Sustainability Alliance Signing Certificate' the themes of any such future alliance may include:

- *Alliance Building & Partnering for Aviation Sustainability*
- *Leveraging Education for Aviation Sustainability,*
- *Spreading Awareness for Aviation Sustainability, and*
- *Delivering a Multi-stakeholder SAF Roadmap for Türkiye.*

The event concluded after the panel discussion titled "Collaboration for a Sustainable Future in Aviation," moderated by



by İbrahim Sünnetçi

Filiz Hayırlı, Government Affairs, Strategy, & Business Development Director at Boeing Turkey.

Speeches

During her opening speech at the event, Managing Director and Country Executive for Boeing Turkey, Ayşem Sargın, stated that Boeing has been present in Türkiye for over 75 years and expressed their pride in the rising success of the Turkish aviation industry during this period. SARGIN stated, "During this growth process, we have worked hand in hand with Türkiye and the Turkish Aviation Sector in various fields, ranging from industry to services, from technology to education. We have achieved significant successes together." She further added, "We have had important suppliers from Türkiye. We have had joint projects in the patent stage in R&D. We have developed technologies together, and today, there is apart from Türkiye in all of Boeing's next-generation aircraft."



Ayşem Sargın

Sargin expressed her views on the Türkiye Sustainable Aviation Platform with the following words: "We are delighted to take our long-standing collaboration with both Turkish Airlines and İstanbul Technical University to a new phase with the establishment of this platform for sustainable aviation in Türkiye. I hope that this platform will grow with the participation of other aviation stakeholders in a brief time, and together, we will increase Türkiye's contribution to global sustainable aviation practices through collaborative efforts. As you know, as Boeing, we support the aviation industry's commitment to achieve net-zero carbon emissions by 2050. To this end, we offer new technology products that provide greater fuel efficiency and result in reduced carbon emissions to our customers. On the other hand, we attach significant importance to sustainable aviation fuels (SAF) to achieve industry goals, and in fact, we have been working on this issue with industry stakeholders worldwide for over a decade. With the roadmap we will develop within the framework of the platform we establish today; we also aspire to lead Türkiye's transformation towards sustainable aviation fuels (SAF). Within this platform, we aim to support sustainability in the Turkish



Aviation Sector through various activities such as education, awareness-raising initiatives, and enhancing collaboration. Of course, we will achieve this common goal not alone but together with our valuable business partners. We invite our entire industry to collaborate with a multifaceted approach

that will both decarbonize aviation and make the social and economic benefits of aviation accessible to everyone."

Talking about sustainable aerospace at Boeing and how they think about this important subject, Moran underlined that no single company or no single entity can achieve Sustainable

Aerospace alone. "So, you saw that theme of togetherness. This is not just a slogan; its sustainable aerospace together is how we really think about this topic; it is so important to us. And if you just look around you, this is the togetherness. This is us coming together. Creating a platform today and bringing other people in due course to help in this important mission. No single company or no single entity will ever do this alone. So that's why we're continuously talking about sustainable aerospace together."

Regarding Boeing's role in Sustainable Aerospace, Moran pointed out that Boeing has always been part of any development any improvement in aerospace, and added, "Boeing, it's not 250 years old, but we're a little bit over 100 years old. And when Bill BOEING, our founder, in 1929, about 15 years after he founded the



Brian Moran



company, he said to let no improvement in flying or flying equipment ever pass us by, and what he meant by that is that when there is a step change in aerospace, Boeing better be part of it and that's how we got the 707, that's how we got the Apollo program that brought us the moon, that's how we got the 787 the first all-composite airplane. You can bet that when there is the next step change in aerospace technology, we will be part of that."

Moran highlighted that just before the pandemic, in 2019, 4.5 Billion flights took place, and this number is going to double in the next 20 years in terms of economic activity. "7 Trillion Dollars in goods move around the world through aviation, and in the process, we generate about 87.7 Million jobs. So aerospace is a force for good, but we must make sure it stays sustainable. If you look at our contribution

to global emissions, it is about 2.5 percent. These are carbon emissions, and you can see how we fit relative to transportation, electricity, and heat. So that number is not high or low; it is what it is. But the challenge we have before is that number stands to grow. So, it is our job to make sure that we reach net zero by the middle of the century," Moran added.

Regarding transportation emissions, Moran underlined that while passenger vehicles contribute about 45 percent, the aviation sector contributes about 12 percent. "Again, that's where I'm not judging, I'm not comparing, but it's important to have some sense of the proportionality because the ground is going to electrify, and we're well on our way as I'll show you in a second. We do not have the luxury in aviation electrifying long missions, so that is why keeping the different modes of transport in context is

very, very important. So, for 2050 our goal is to be carbon neutral. And as the airlines under IATA have set that goal, we as the manufacturers have set that goal, and most importantly, through the ICAO, 193 countries stand together and set that goal."

According to Moran, in 2050, aviation would look like twice as many passengers, 10 Billion passengers, 9 Trillion economic activity, and 180 Million jobs. "This is what we're fighting for. This is what it is about," Moran said.

Moran emphasized that to decarbonize airspace, Boeing has defined four strategies, namely, Fleet Renewal, Operational Efficiency, Renewable Energy, and Advanced Technology. Moran shared the following information on these 4 strategies:

"It very much starts with fleet renewal. Every generation of airplanes

that we introduce into the aerospace is about 15 to 25 percent lower emissions than the airplanes they replace. Levent (Koyuncu) talked about the young fleet that Turkish Airlines has. So, this is an airline that invests in new capabilities and keeps the fleet young so that the emissions stay relatively low. The second pillar is about operational efficiencies. Many of you have flown into several European airports, and you end up circling. The airspace is congested. The airspace is antiquated. Eurocontrol estimates there is about eight to 10 percent of CO2 locked up in the sky just by inefficient flying. Not making use of the digital technologies that are in the cockpit; fuel dashboard, wind updates, weather updates that continues to send arrivals which allow pilots to fly rather than step change to fight continuous gradual descent, not burning unnecessary fuel. So that's operational efficiency. Renewable energy is what I am going to talk about the most, and if you think about the platform we are launching today and the importance of sustainable aviation fuel, which is what it's about. But it is SAF, and it is also green hydrogen because you need green hydrogen to produce SAF. Last but certainly not least, and back to Bill BOEING's quote: Let no new improvement in flying and flying equipment pass us by; we are investing in advanced technologies today. We

have an ECO Demonstrator Program that has evaluated over 230 technologies over 10 years. A third of those that have made it onto the current airplanes, we are investing in the Transonic Truss Wing Program. This is a demonstrator where together with NASA and other partners. We are going to invest up to a Billion Dollars into two flying demonstrators to explore new technologies for engines and new tech technologies for aerodynamics. So those are the four strategies."

Moran stressed that SAF is a requirement and added, "This is the baseline. Why do I say this? Sustainable Aviation Fuels make every flight 50 to 80 percent lower emissions; it is a drop in fuel. It can go into a 50/50 blend; we've flown 100 percent and are available for every flight to make every mission more sustainable."

Regarding the electrification and hydrogen propulsion in aerospace, Moran shared his comments in the following lines:

"Yes, electric and hybrid electric will play a role, but the battery density and the limitations around physics will not allow us to fly long missions and long durations on battery. Certain missions, certain regional missions, will be decarbonized, but that is if you look at that's less than one percent of the total global emissions. If you electrify every possible mission in this range, based



on today's technology or even stretching the assumption, it's less than one percent. We chase every percent in this business, so it is important... Over time electricity and hydrogen will earn their way in. And yes, hydrogen propulsion will eventually earn its way into aviation, but as our CEO often says, this is something for the second half of the century. Today there are 23,000 airplanes in the sky. I showed you the flights we're going to be at 9 Billion flights in 20 years. That means we are going to be at 45,000 airplanes by then. These are conventional airplanes that fly on jet fuel. So, they require SAF even as hydrogen and some other novel propulsion technologies earn their way into this system."

Levent Konukcu, Chief Investment & Technology Officer at Turkish Airlines (THY), emphasized climate change as one of the most pressing global issues, and it has gained significant importance on the aviation industry's agenda. He added,

"Aviation is one of the industries that has taken global action and set the most comprehensive goals to reduce greenhouse gas emissions. As the global face of Türkiye, we closely monitor the developments in the sector. As the flag carrier airline, we are taking significant steps that befit our country and partnership."

Levent Konukcu mentioned in his speech that they recently announced their strategies for the year 2033, and they have included the sustainability initiatives they will implement soon. He stated, "In this 10-year strategy, we have outlined our efforts in the field of sustainability. Accordingly, we have announced our goal of becoming a carbon-neutral airline by 2050 to all our stakeholders. Fleet modernization, improvements under our comprehensive fuel-saving policy, and increasing the use of sustainable aviation fuel will be our key pillars as we progress towards this goal."

Brian Moran, Vice President of Boeing's Global Sustainability Policy & Partnerships, emphasized the alignment of the establishment of the Türkiye Sustainable Aviation Platform with Boeing's decarbonization strategies. He explained the four strategies supporting the aviation industry's goal of achieving net-zero carbon emissions by 2050: "Transition to Renewable Energy, Advanced Technologies, Operational Efficiency, and Fleet Renewal." Moran stated, "In the past 10 years, we have invested approximately US\$55 Billion in innovation to enhance the sustainable product lifecycle, and we offer our customers high fuel efficiency and low-carbon emission products." Boeing also commits to making its commercial aircraft compatible with 100% sustainable aviation fuel by 2030 and leads the industry to expand the fuel supply.



Ayşem Sargin: "We intend to establish a roadmap for sustainable aviation fuel in Türkiye."

As part of the Türkiye Sustainable Aviation Platform Opening Ceremony, we had a brief interview with Managing Director and Country Executive for Boeing Turkey, Ayşem Sargin, on the importance of the platform for Boeing and the Turkish Aviation Industry.

Aviation Turkey: First of all, what is the importance of this platform? What contributions and gains will it have for both Boeing and the Turkish Aviation Sector? Secondly, Mr. Brian (Moran) mentioned that Boeing had identified four strategic areas, including Transition to Renewable Energy, Advanced Technologies, Operational Efficiency, and Fleet Renewal, to

achieve net zero carbon emissions by 2050. What kind of business potential is there with Türkiye in these areas? Does Boeing collaborate with local companies on SAF (Sustainable Aviation Fuel)? Do you have any ongoing infrastructure projects in this regard?

Ayşem Sargin: With the agreement we have signed, we have made a significant beginning. İstanbul Technical University is an exemplary partner with whom we have been developing successful projects for many years. We even have technology development projects that we have brought to the patent stage in collaboration with İstanbul Technical University. Turkish Airlines, again, is one of our

biggest business partners in Türkiye, and we take pride in its rapid growth. We wanted to establish this platform to assess together the impact of aviation emissions in Türkiye in the coming period. Let us discuss what measures we can take together to minimize these emissions, create awareness in this regard, and produce solutions. Let us make plans. As you know, planning is the beginning of everything. We can only do this if we bring together the industry stakeholders. As you saw in Brian's (Moran) presentation, this is a global goal and can only be achieved as a team. Because when we talk about sustainability in aviation, it is not just about airlines; it is not just about the industry. There are also airports. We all contribute from different sides to the aviation industry's carbon emissions. Let us come together and discuss how we can minimize them. Let us organize training programs for this. There will be different educational programs for children, youth, and professionals...

Aviation Turkey: Could you provide more information about the education aspect? Who will İstanbul Technical University give this education to? Will it be available for pilots and other industry workers as well?

Ayşem Sargin: Our goal here is to create awareness about the impact of aviation on sustainability,

primarily targeting children and youth. But beyond that, it is also essential for professionals to receive this education. For example, airline personnel need to receive this education or for airport employees to understand what they are doing regarding waste management. We even have exhibitions in mind.

İTÜ will contribute to the development and delivery of these trainings. Furthermore, we intend to establish a roadmap for sustainable aviation fuel in Türkiye. There are certain resources available, and Turkish Airlines has made commitments in this regard. In the coming period, through their collaboration, we need to bring together all stakeholders in Türkiye to determine what can be done in this area. We believe that, as Boeing, we have committed to having all our aircraft fly with 100% sustainable aviation fuel by 2030. And to achieve this, we need partners.

Aviation Turkey: Have you set a timetable for this?

Ayşem Sargin: We have project timelines in the background, of course. Hopefully, we will inform all of you about this soon. But overall, what we want to do is for Türkiye to take steps on this path. Let us make these steps more visible globally. And let us achieve Türkiye's goals by coming together and collaborating. That is our objective.

Aviation Turkey caught up with Boeing Vice President for Global Sustainability Policy & Partnerships Brian Moran during the Türkiye Sustainable Aviation Platform Opening Ceremony to get first-hand information on the role that Boeing Türkiye and Turkish Aviation Sector would play in Boeing's ongoing sustainability projects and future strategies that defined to support Boeing's goal of achieving net zero carbon emissions by 2050 and consist of; Fleet Renewal, Operational Efficiency, Renewable Energy and Advanced Technology.

Brian Moran: Türkiye is especially important for us. As Ayşem SARGIN has said in the presentation, the company-to-country relationship goes back almost 80 years, and on the supply side, I think US\$2 Billion is the number that we have already sourced over the years on sustainability. Specifically, it starts with partners like Turkish Airlines, who are investing in new products, very efficient products that are 15 to 25 percent more efficient. So, partners like Turkish Airlines are at

the top of the list. But then I talked about the other opportunities around operational efficiency, sustainable aviation fuel, and advanced technology. You know we have an engineering center here that is working on advanced technologies, and this platform that we have launched today will look at Sustainable Aviation Fuels (SAF) and the potential for SAF in Türkiye. So, we are very, very much looking forward to that.

Aviation Turkey: One of the strategies you have defined to achieve net zero carbon emissions by 2050 is Fleet Renewal. Boeing is one of the main suppliers of commercial airplanes to THY, so do you have any ongoing negotiations with THY for the renewal of its Boeing fleet?

Brian Moran: We always talk to our customers, that's part of what we do, and we are immensely proud of the relationship we have with Turkish Airlines.

Aviation Turkey: Türkiye's flag carrier Turkish Airlines (THY), signed the Global Sustainable Aviation Fuel (SAF) Declaration with the participation of Rolls-Royce and Airbus on October 7 during the İstanbul Airshow held in October 2022. With over 100 operational optimization



Brian Moran: "We look forward to the contribution that they will make to this platform."

projects successfully implemented since 2008 to reduce the carbon footprint, THY saved 57,581 tons of fuel in 2022 alone, thus preventing the release of 181,379 tons of carbon emissions into the atmosphere.

Brian Moran: Yes, as we heard today, Turkish Airlines take sustainability seriously. The commitment to SAF, the commitment to fleet renewal. That is why we are partnering with them. That is why they are at the top table with İstanbul Technical University, and we look forward to the contribution that they will make to this platform.

Aviation Turkey: So, have you defined any further or new role for Boeing Türkiye in THY's fleet renewal and SAF commitment?

Brian Moran: We have already talked about the supply chain impact we have had over the years. Well, look, I think this platform will be exciting because we are going to look at SAF and a roadmap for SAF. We are going to look at frankly education and the educational side of this. This is a complicated space. It requires some explanation, and no better partner than a technical university to do that with you 🙌



Emirates Future Order Book for Around 200 Aircraft from Airbus and Boeing



by Şebnem Akalin

Emirates is one of the biggest airlines in the world. As Aviation Turkey magazine, we hosted Thierry Aucoc - Senior Vice President CO Europe Emirates Airlines today.

Şebnem Akalin: First of all, thank you very much for your time. Emirates is one of the biggest airlines in the world. Can you tell us about your fleet, your current destinations, and your future plans such as the new airplanes or destinations will be added soon.

Thierry Aucoc: We operate a young and modern fleet with an average age of 9

years, currently consisting of A380s and Boeing 777s. Emirates fleet comprises 260 aircraft including 116 A380s out of which more than 90 are deployed on 50 routes, and 123 Boeing 777-300ERs, 10 Boeing 777-200LRs and 11 freighters.

Demand for flights across the aviation industry is currently higher than the supply of available aircraft. Emirates is well-equipped to counter this challenge

with its future order book for around 200 aircraft from Airbus and Boeing.

In November 2022, we launched our \$2 billion retrofit program to upgrade the entire interior cabins of 120 Airbus A380 and Boeing 777 aircraft – two of the largest commercial aircraft types in service today. This ambitious project, representing a multi-billion-dollar investment to ensure



Emirates' customers "fly better" for the coming years is managed entirely by Emirates' Engineering team.

The team will be working round the clock to completely retrofit Emirates aircraft continuously for over 2 years. Once the 67 earmarked A380s are refreshed and back in service, 53 777s will undergo their facelift. This will see nearly 4,000 brand new Premium Economy seats installed, 728 First Class suites refurbished and over 5,000 Business Class seats upgraded to a new style and design when the project is complete in April 2025.

In addition, carpets and stairs will be upgraded, and cabin interior panels refreshed with new tones and design motifs including the iconic ghaf trees which are native to the UAE. No other airline has handled a retrofit of this magnitude in-house.

We are continuously working to provide the best products for our customers. Although there is high travel demand at the moment, we never take our customers for granted and are always working hard to deliver the best experience on ground and inflight.

In terms of capacity, we've restored most of our operations and plan to

grow our network further with the launch of a new destination this year, Montreal, in July.

At the end of our last financial year, 31 March 2023, the Emirates network comprised 150 destinations across six continents, including 9 cities served by its freighter fleet only. Emirates carried 43.6 million passengers (up 123%) in 2022-23, with seat capacity up by 78%. The airline reports a Passenger Seat Factor of 79.5%, compared with last year's passenger seat factor of 58.6%; and a 7% increase in passenger yield to 37.5 fils (10.2 US cents) per Revenue Passenger Kilometre (RPKM), due to a change in cabin and route

mix, fares and currency.

We currently offer more than 30% capacity increase for flights to and from Turkey compared to 2019. For the time being, Emirates has three daily flights between Dubai-Istanbul, a total of 21 frequencies weekly. The flights are operated by wide-body aircraft, including our flagship A380 on one daily service, while the other two are Boeing 777-300ER. During the 2022-2023 financial year, over 70,000 passengers were carried from Istanbul to Dubai by Emirates. For the new financial year of 2023-2024, Emirates aims to carry more than 130,000 passengers.



✈️ **Şebnem Akalın:** This year again Emirates won the 'Best Airline Worldwide' from Business Traveller Middle East Awards 2023. What can you tell about this, with which services your customers put Emirates on top of the world.

Thierry Aucoc: It is an honor to be awarded as the "Best Airline Worldwide" for the tenth year in a row. Emirates also earned high marks for constantly delivering better experiences through its best-in-class service and leading industry products winning Best First Class, Best Premium Economy, and Emirates' First Class Lounge was named Best Airport Lounge in the Middle East.

This is a testament to Emirates' commitment to providing top-notch services to our customers

and reflects the airline's commitment to investing, innovating and reshaping the way people think about, and enjoy air travel.

Less than two years after its debut, Emirates' Premium Economy has become the industry 'gold standard' for this cabin class, continually wowing customers thanks to its spacious seats and pitch, luxury finishing and other numerous meticulous touches.

Overall, Emirates' commitment to providing exceptional service, its extensive network of destinations, and its focus on innovation and technology are all factors that have contributed to our success and recognition as the 'Best Airline Worldwide' at the Business Traveller Middle East Awards 2023.

✈️ **Şebnem Akalın:** I had a chance to fly with A380 from Istanbul to Dubai and attended to Dubai Expo. In Emirates pavilion, I saw unbelievable technology behind the sky's Emirates is working on. Can you tell us more about the technology your customers will be interested in. What will we see in 10 years when we are flying with Emirates?

Thierry Aucoc: Emirates is known for its commitment to innovation and technology, and this is reflected in the airline's aircraft, in-flight services, and its presence at events like Expo Dubai.

Emirates was one of the first airlines to introduce on-board showers for first-class passengers on its A380 aircraft. The airline also makes significant investments in our in-flight entertainment and

connectivity, offering flyers an unmatched variety of the latest movies, TV shows and music content through our award-winning ice system. We were the first to install in-seat video screens back in 1992.

Our Boeing 777 Gamechanger aircraft are also equipped with unique and industry-leading inflight technology including virtual windows that offer passengers a real-time view of the skies, as well as temperature and lighting control in First Class suits.

Emirates will continue to invest to enhance the travel experience for our customers. This could include advancements in in-flight entertainment, improvements in seating and cabin design, and new technologies that improve the efficiency and safety of the airline's aircraft.



Over the past 3 years, we accelerated our digital capabilities and introduced an integrated biometric path that gives passengers a seamless travel journey from specific check-in to boarding gates, improving customer flow through the airport with less document checks and less queuing. We've also significantly enhanced our apps, allowing passengers to check-in, book their meals and special requests and set up their own music playlist and sync it with the inflight entertainment system when on board, all done seamlessly and with the most convenience.

Last month, in the heart of Dubai's bustling financial district, Emirates launched a new City Check-in and Travel Store, featuring our first check-in robot, Sara. This facility enables customers to conveniently book travel, check-in for flights, drop their luggage, shop for travel essentials, and save time at the airport.

Emirates is building an advanced training facility to accommodate 6 Full Flight Simulator Bays (FFS) for our future Airbus A350 and Boeing 777X aircraft. The brand new, 63,318 sq. ft. facility is slated to open in March 2024. This US\$ 135 million investment to build a new pilot training centre will ensure Emirates' readiness to commence its pilot training ahead of the delivery of its new aircraft fleet starting from 2024. The building will be equipped with the latest, technologically advanced simulators to provide the best training for pilots, while using solar power to reduce energy consumption.

Emirates is committed to innovation and technology, and customers can look forward to continued advancements that improve the travel experience and reduce the airline's environmental impact in the years to come. Emirates' recruitment drive is high for IT professionals with a variety of job roles



Thierry Aucoc

that will support the company's plans and vision in aviation technology and innovation. This is an exciting opportunity for individuals with a passion for technology to join a leading airline and contribute to its ongoing success.

✈️ Şebnem Akalın: Some airline companies have initiated various positive actions to increase awareness, sometimes with the inboard services such as reusable plastics or sometimes with using 100% Sustainable Aviation Fuel. In which part of protecting the future we will see Emirates?

Thierry Aucoc: Emirates is committed to environmental sustainability and focus our efforts on three areas: reducing emissions;

consuming responsibly; and preserving wildlife and habitats.

Our Environmental Sustainability Executive Steering Group meets at least quarterly to set direction and review progress on each of the focus areas at a corporate level. At a working-group level, various internal committees meet regularly to co-ordinate and implement sustainability actions.

The newer the aircraft, the more fuel-efficient they are. Emirates has a good starting position here with a young and efficient wide-body fleet. We are also investing millions in new generation aircraft with 200 units on order.

We actively implement ways to reduce

INTERVIEW



unnecessary fuel burn and emissions while maintaining the highest safety standards. Last year, we successfully implemented Green Standard Operating Procedures (Green SOPs) by our pilots, which include measures such as: using reduced engine taxi, idle reverse, prudent judgement on extra fuel, optimised flap landing, inflight speed management to minimise fuel burn, and use of direct

routing opportunities. In 2022-23, Green SOPs and other operating initiatives helped to reduce fuel burn by more than 50,000 tonnes and carbon emissions by over 160,000 tonnes.

We recently announced a US\$200m sustainability fund for research and development (R&D) projects focused on reducing the impact of fossil fuels in commercial aviation. This is the biggest

single commitment by any airline on sustainability, with funds to be disbursed over 3 years. Emirates will identify partnerships with leading organisations working on solutions in advanced fuel and energy technologies.

On 31 Jan, Emirates conducted a test flight with 100% Sustainable Aviation Fuel (SAF) of an Emirates Boeing 777-300ER. SAF is a synthetic aviation fuel sustainably

produced from non-fossil raw materials and is seen as a key technology for the decarbonisation of aviation. In contrast to conventional fuels, SAF is not produced from fossil sources and is therefore a more sustainable alternative. By using SAF, greenhouse gas emissions can be reduced by up to 80%.

We have active recycling initiatives which last year, saw more than 500,000kg of glass and plastic retrieved from our flights for recycling. That's almost the weight of a fully loaded A380, the airline's flagship. Last year, Emirates also saved 1,000 tons of paper by switching to digital menus.

Şebnem Akalın: What would you like to add to our readers?

Thierry Aucoc: Emirates is committed to supporting Turkey's aviation sector and its local community through partnerships with local entities. The aviation industry plays a critical role in the economic development of countries, and partnerships between the various aviation players can lead to increased stability, innovation, and growth for communities. We look forward to continue working closely with our partners to further support the local aviation sector and contribute to the development of the local community.



HAVELSAN's B737 Max Full Flight Simulator Achieves EASA Level D Certification

Ankara, Türkiye headquartered simulator manufacturer HAVELSAN announced that its Boeing B737MAX Full Flight Simulator (FFS) operated by Turkish Airlines achieved European EASA Level D certification.

Being the one and only simulator manufacturer in Türkiye, HAVELSAN carried its 40 years of experience in the military field to the civilian field with the delivery of EASA Level D certified Boeing 737-800 NG Simulator to Turkish Airlines in 2017. After the contract signed in 2018, including a total of 11 A320 CEO NEOs and Boeing 737 Max FFS and FTD Simulators, mass production started. Along with the delivery of the simulator, the company has achieved the next significant milestone to broader its pilot training tools attractiveness to airlines and training



centers around the globe. HAVELSAN, which will start Airbus A320 CEO/NEO FFS factory tests in May, aims to obtain EASA Level D Certification in the third quarter of 2023. With these simulators to be delivered, the company will have the opportunity to offer its users state of the art simulator solutions for all narrow body aircrafts. Securing its position in the simulation field, the company is attracting attention globally, following the successful delivery to the national flag carrier of Türkiye, Turkish Airlines.

Mehmet Akif Nacar, Ph.D. CEO of HAVELSAN, stated the contentedness of achieving European EASA Level D certification for Boeing 737Max FFS. "Many hours of effort have been put on the manufacturing of our simulator to create a world-class pilot training tool for airlines and training centers. Working with one of the world-class airlines is also a great honor for us. We are looking forward to further cooperation with Turkish Airlines, the most prominent global side of our country," said Nacar.

Bilal Ekşi, CEO of Turkish Airlines, said, "As the national flag carrier of our country, we are proud to have been carrying our flag to each corner of the world for many years. As the airline that reaches to more countries and international destinations of the world than any other, we expand our fleet steadily to meet the need of increasing demand while improving our training capacity by a significant amount. With this in mind we have put our trust in HAVELSAN, one of the world's leading flight simulation manufacturers, to install three Airbus A320 FFS and two Boeing 737 Max FFS. We are glad to achieve European EASA Level D certification for our simulator and we hope to continue our long-term cooperation."

Taking its stance in the simulation industry for 40 years, HAVELSAN is dedicated to meet the needs of Flight Simulator Training Devices both domestically and internationally and continues to provide advanced solutions to its customers. The company is currently actively seeking additional airline or training center operators to share information about its products and the unique offering that it can provide.





Lufthansa Airlines: Setting the Standard for Excellence in the Airline Industry

Lufthansa Airlines has been making headlines lately with its latest developments and news, and for good reason. As one of the world's leading airlines, Lufthansa has been setting the standard for excellence in the industry, and its recent developments are a clear sign to its commitment to providing the best possible travel experience for its customers.

Lufthansa is expanding its premium First Class offering with the "Suite

Plus," a separate double cabin with ceiling-high walls and an entirely closable door, large table and two wide seats that can be combined into a comfortable double bed if required. With this flying private room, Lufthansa is setting a new standard in comfort and individuality within its most sophisticated travel class.

The First Class Suite's features are unparalleled anywhere in the world: Guests can warm or cool

their nearly one-meter-wide seats in the suite according to their personal needs and connect their own mobile device to the entertainment system. Ample storage space is provided by a suite wardrobe so that travelers can comfortably change and have all their personal belongings at hand. Service at the highest level also awaits: The crew serves the gourmet menu at a time requested by the guests. The meal can be enjoyed in the private suites at the large First

Class table, similar to a restaurant.

"Lufthansa Allegris"

The First Class will be introduced in 2024, on the newly delivered Airbus A350s as part of "Lufthansa Allegris," the airline's new long-haul product. In the process, the company is improving the overall travel experience for customers in all travel classes: Economy, Premium Economy, Business and First Class.



"Allegris" is part of the largest product and service overhaul in the Lufthansa Group's history, with a total investment of 2.5 billion euros by 2025.

For the first time, guests in Lufthansa Business Class can also look forward to their own suite, which offers even more comfort and privacy due to chest-high walls and sliding doors. Here, travelers in the first rows can enjoy extended personal space, a monitor up to 27 inches in size and ample storage. Each suite also offers its own wardrobe and personal minibar. Inside, it is possible to connect the two suites so that business class guests

traveling together can enjoy a large degree of privacy. With "Allegris," the freedom of choice for Business Class guests has never been greater. Travelers can choose

between six additional seat options, depending on whether they want an extra-long bed measuring 2.20 meters, extra space and work area, a seat with a baby bassinet, or simply an exclusive seat directly by the window. A double seat, in which the center console can be retracted to transform it into a reclining surface for two, is also available.

The new Premium Economy Class has already been introduced at SWISS in spring 2022. The "Allegris" seat offers more legroom, a fold-out leg rest, and can be adjusted even further back than the current model. Because it will be integrated into a hard shell, however, adjusting it will have no effect on fellow passengers in the row behind. The table and monitor always remain in position. For more comfort, Premium Economy Class passengers will also receive a travel amenity

kit made of sustainable materials.

With the new "Allegris" product generation, Lufthansa is also giving its guests significantly more choice in Economy Class. In the future, travelers will have the option of booking additional seats in the first rows that offer more legroom, or a free seat next to them.

The Lufthansa Group has set itself ambitious climate protection goals and aims to achieve a neutral CO₂ balance by 2050. Already by 2030, the aviation group wants to halve its net CO₂ emissions, compared to 2019, through reduction and compensation measures. The reduction roadmap to 2030 was validated in 2022 by the independent Science Based Targets Initiative (SBTi).

Lufthansa has also been expanding its





route network, with new destinations being added all the time. The airline now operates to over 200 destinations worldwide, making it one of the most comprehensive airline networks in the world. This expansion is great news for travelers, as it means more options for getting to their desired destination, mostly via its hubs in Frankfurt and Munich..

Lufthansa Group: A Leader in Sustainable Aviation

In addition to its commitment to providing the best possible travel experience for its customers, Lufthansa Group is also a leader in sustainable aviation. The group has made significant investments in sustainability measures, with a strong focus on

reducing its carbon footprint and promoting sustainable practices throughout the industry.

One of the most significant sustainability measures taken by Lufthansa Group is the introduction of new, more fuel-efficient aircraft. The group has recently placed orders for the Airbus A320neo and A321neo, which are among the most fuel-efficient aircraft in the world. These new aircraft will help to reduce the airline's carbon footprint, making Lufthansa Group a leader in sustainable aviation.

Lufthansa Group has also been investing in sustainable aviation fuels. The group has been working with partners to develop and produce sustainable aviation fuels, which are made from renewable sources

and have a much lower carbon footprint than traditional fossil fuels. This investment in sustainable aviation fuels is a significant step towards reducing the aviation industry's impact on the environment.

Finally, Lufthansa Group has been working to promote sustainable practices throughout the industry. The group has been actively involved in industry initiatives to reduce emissions and promote sustainable practices, and has been recognized for its leadership in this area.

Overall, Lufthansa Group is setting the standard for sustainable aviation. Its investment in new, fuel-efficient aircraft, sustainable aviation fuels, and promotion of sustainable practices throughout the industry

make it a leader in the fight against climate change.

New Flight Orders: Expanding Lufthansa Group's Fleet

In addition to its commitment to sustainability, Lufthansa Group has also been expanding its fleet with new flight orders. The group has recently placed orders for a number of new aircraft, including the Airbus A320neo and A321neo, as well as the Boeing 777X.

These new aircraft will help to modernize Lufthansa Group's fleet and provide passengers with the latest in-flight technology and comfort. The Airbus A320neo and A321neo are among the most fuel-efficient aircraft in the world, while the Boeing 777X offers passengers a more spacious and comfortable seating experience.

The expansion of Lufthansa Group's fleet is great news for travelers, as it means more options for getting to their desired destination. With a comprehensive route network and a modern, fuel-efficient fleet, Lufthansa Group is well-positioned to continue providing the best possible travel experience for its customers 🌍

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- Meet regulatory requirements and aviation industry standards
- Enable efficient air transport service delivery and operations
- Ensure your sustainability as an aviation organization

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SIA Group Posts Highest Net Profit In Its 76-Year History

Singapore Airlines (SIA) achieved record revenue in its 76-year history, driven by solid demand, operating profit, and passenger load factor. Despite declining cargo demand, SIA's cargo revenue remained above pre-Covid levels, with robust near-term and forward passenger sales across all cabin classes.

Despite facing challenging conditions such as geopolitical and economic

uncertainties, high-cost inflation, and increasing global passenger capacity, the airline industry continues to move forward. SIA is investing in strategic initiatives to strengthen its position for future opportunities, along with its commitment to providing the industry's best-in-class cabin products and impeccable services.

Following the record profit, the company has decided to

distribute a final dividend of 28 cents per share.

Sia Group Financial Performance

Financial Year FY2022/23 – Profit and Loss

The Singapore Airlines (SIA) Group financial performance for the financial year FY2022/23 is summarized as follows:

At the onset of the

Covid-19 pandemic in 2020, the Group acted swiftly and decisively to

shore up liquidity and build its financial resilience. This strong liquidity position, and the confidence it engendered, enabled the Group to take a long-term view and make several strategic decisions ahead of the recovery in global air travel. SIA and

Group Financial Results	FY2022/23 (\$million)	FY2021/22 (\$million)	Better/ (Worse) (%)	2nd Half FY2022/23 (\$million)	1st Half FY2022/23 (\$million)	Better/ (Worse) (%)
Total Revenue	17,775	7,615	133.4	9,358	8,417	11.2
Total Expenditure	15,083	8,225	(83.4)	7,901	7,182	(10.0)
Net Fuel Cost	5,209	2,189	(138.0)	2,514	2,696	6.8
Fuel Cost (before hedging)	5,958	2,409	(147.3)	2,845	3,113	8.6
Fuel Hedging Gain	(749)	(219)	242.0	(332)	(417)	(20.4)
Fair Value Gain on Fuel Derivatives	(1)	(78)	(98.7)	-	(1)	(100.0)
Non-fuel Expenditure	9,874	6,113	(61.5)	5,387	4,487	(20.1)
Operating Profit/(Loss)	2,692	(610)	-	1,458	1,234	18.2
Net Profit/(Loss)	2,157	(962)	-	1,230	927	32.7

Scot retained most of their talented staff, who were ready to step up when called upon. A large proportion of the Group's aircraft fleet was kept operational, albeit at low utilization levels in the early recovery phase, ensuring they were properly maintained and fully functional. The Group built up a strong base network in a deliberate and calibrated manner, ensuring that SIA and Scot were in a position to ramp up ahead of any return in passenger traffic.

As a result, when the demand for air travel surged in FY2022/23 after Singapore fully reopened its borders in April 2022, and as restrictions on international air travel eased globally, SIA and Scot could ramp up operations at short notice. Working collaboratively with key members of Singapore's aviation ecosystem, both carriers were among the first to launch flights as borders reopened and captured the pent-up demand as air travel returned.

Group passenger capacity reached 79% of pre-Covid1 levels in March 2023, higher than the 58% level for international scheduled services of Asia-Pacific airlines. SIA and Scot collectively carried 26.5 million passengers, up six times from a year before. The passenger

load factor (PLF) jumped 55.3 percentage points to 85.4%, the highest in the Group's history. SIA achieved a record PLF of 85.8%, while Scot delivered a PLF of 83.9%.

The cargo segment's performance moderated year-on-year as the demand for air freight declined, and supply chain disruptions brought about by the Covid-19 pandemic subsided. Macroeconomic headwinds dampened consumer demand, while high inventory levels led to a slowdown in new orders. Cargo yields fell year-on-year as industry belly hold capacity increased with the progressive restoration of passenger flights. Nevertheless, cargo revenue remained 83% above the pre-Covid level recorded in 2019.

SIA Group revenue increased by \$10,160 million (+133.4%) year-on-year to a record \$17,775 million. Passenger-flown revenue rose \$10,560 million (+376.3%) to \$13,366 million as traffic grew 449.9%, outpacing the capacity expansion of 94.0%. Revenue per available seat-kilometer (RASK) was 10.0 cents, the highest yearly RASK in the Group's history. Cargo flown revenue fell \$735 million (-16.9%) to \$3,604 million as a result of lower cargo loads (-11.4%) and yields (-6.2%). Notwithstanding, this was the second-highest

annual cargo revenue figure in the Group's history. Expenditure grew by \$6,858 million (+83.4%) year-on-year to \$15,083 million. This comprised a \$3,020 million increase (+138.0%) in net fuel costs, a \$3,761 million increase (+61.5%) in non-fuel expenditure, and a \$77 million increase from the year-on-year impact of the fair value changes on fuel derivatives. Net fuel cost rose to \$5,209 million, mainly due to the 49.6% increase in fuel prices (+\$1,942 million) and higher volumes uplifted (+\$1,495 million), and this was partially offset by higher fuel hedging gains (-\$530 million). The increase in non-fuel expenditure was well within the 94.0% increase in passenger capacity.

Group's operating profit came in at a record \$2,692 million, reversing the \$610 million loss in FY2021/22. Operating profit for SIA was a record \$2,601 million, an increase of \$2,713 million from the previous financial year. Scot achieved a record operating profit of \$148 million, up \$602 million from FY2021/22.

The Group posted a record net profit of \$2,157 million for the year versus a \$962 million net loss in the previous year (+\$3,119 million). This was mainly driven by better operating performance (+\$3,302 million) and lower net

finance charges (+\$338 million) and partially offset by a tax expense versus a tax credit last year (-\$615 million).

The SIA Group's record financial performance for FY2022/23 is a testament to its proactive strategic initiatives, pre-emptive preparation that was made when borders remained closed, and the hard work, dedication, and sacrifices of its employees.

Fleet Development

SIA took delivery of one Airbus A350-900 in March 2023 and one Boeing 787-10 in April 2023. These aircraft have since joined the operating fleet, alongside one 737-8 aircraft post the retrofit of its cabin.

As of 31 March 2023, the Group had 195 aircraft in its operating fleet comprising 188 passenger aircraft and seven freighters. SIA's operational fleet comprised 133 passenger aircraft and seven freighters, while Scot had 55 passenger aircraft. With an average age of six years and nine months, the Group fleet is one of the youngest and most fuel-efficient in the airline industry. This allows it to pursue operating efficiencies and continue offering world-class products and services to its customers. This also supports the Group's

decarbonization goals, as operating a young fleet of new-generation aircraft is the most effective and direct way for an airline to lower carbon emissions in the near term materially.

The Group recently reached an agreement with Boeing to adjust its aircraft order book. This includes swapping three 787-9s for three 787-10s and canceling eight 737-8s. These adjustments align with the Group's long-term fleet renewal strategy and support its projected operational requirements. Following these adjustments, the Group currently has 100 aircraft in its order book.

Network Development

In the fourth quarter of FY2022/23, SIA reinstated services to Guangzhou, while Scoot resumed services to Balikpapan and Qingdao. As of 31 March 2023, the Group's passenger network covered 109 destinations in 36 countries and territories. SIA served 74 destinations, while Scoot served 58 destinations. The cargo network⁸ comprised 118 destinations in 38 countries and territories.

For the Northern Summer operating season (26 March 2023 to 28 October 2023), the Group will expand its services to China with the resumption of Scoot's flights to Haikou, Ningbo, and Xi'an (April 2023), Nanning and Shenyang

(May 2023), Jinan (July 2023), and Nanchang (August 2023). Scoot has increased flight frequencies to Athens, Fuzhou, Guangzhou, Hangzhou, Langkawi, Makassar, Manado, Penang, Perth, Taipei-Hokkaido (Sapporo), Tianjin, and Zhengzhou. SIA will mount supplementary flights to Barcelona, Frankfurt, and Rome to meet the higher demand during the 2023 summer peak and resume services to Busan in August 2023. To align capacity with demand projections, SIA will suspend services to Vancouver in October 2023, and Scoot will suspend operations to Gold Coast in July 2023.

The SIA Group's capacity is projected to reach an average of around 83% of pre-Covid levels in the first half of FY2023/24.

Outlook

The demand for air travel remains robust in the first quarter of FY2023/24, underpinned by the recovery in air travel in East Asia. Forward sales remain healthy across all cabin classes, led by a strong pick-up in bookings to China, Japan, and South Korea. The Group will monitor the demand for air travel and adjust its capacity accordingly.

Near-term cargo demand is expected to remain soft as the industry navigates headwinds from the macroeconomic

environment and as inventory levels recalibrate to post-Covid conditions. Inflation and weak economic conditions will impact consumer demand and trade. Increased belly hold capacity amid softer demand continues to exert downward pressure on cargo yields, particularly on key trade lanes.

Geopolitical and macroeconomic uncertainties, as well as high-cost inflation, could pose challenges for the airline industry in the months ahead. Even though fuel prices have moderated in recent months, they remain at elevated levels. As competition is expected to increase with more capacity being injected on international routes, the Group will monitor developments closely and be agile and nimble in its response.

The two chapters of the SIA Group's Transformation program, the first running from FY2017/18 to FY2019/20 and the second from FY2020/21 to FY2022/23, have strengthened its foundations to help the Group navigate future challenges.

Despite the pandemic, the Group remained committed to its longstanding strategy of buying and operating new-generation aircraft. This enables it to drive further operating efficiencies and

support ongoing efforts to lower carbon emissions materially. The Group also continued investing in industry-leading products and services to strengthen its premium branding. This included retrofitting its Airbus A380 and Boeing 737-8 aircraft, revamping its flagship lounges at Singapore Changi Airport Terminal 3, and an order for the all-new Airbus A350F freighters.

To prepare for the future, several strategic initiatives were undertaken, including the continued expansion of its network through deeper collaboration with like-minded airlines, the proposed merger of Air India and Vistara to bolster SIA's presence in the fast-growing Indian aviation market, as well as Scoot's decision to lease nine Embraer E190-E2 aircraft and expand its footprint to secondary points in the region.

The Group's robust financial position, commitment to offering best-in-class products and services, agility, and resilience, as well as its dedicated and talented staff members, will continue to strengthen its leadership position in the airline industry.

The SIA Group is grateful to all customers, shareholders, partners, staff, and stakeholders for their continued support, which it does not take for granted 🙏



British Airways Becomes Latest Airline to Operate to Istanbul Sabiha Gökçen

Istanbul Sabiha Gökçen has become the latest destination to join British Airways' network, with the inaugural flight touching down on the Anatolian side of Istanbul on Thursday 1 June 2023.

The new route between London Heathrow (LHR) and Istanbul Sabiha Gökçen (SAW) will operate four times per week on Mondays, Thursdays, Fridays and Sundays on a mix of A320 and A321 aircraft.

Sabiha Gökçen Airport has become a hub adding three more destinations this June to its extensive network. These include

London Heathrow (LHR), Rhodes (RHO) and Mytilene (MJT), Greece.

Sabiha Gökçen serves 154 destinations located across 51 countries via flights operated by 45 airlines. The first four months of 2023 saw the City Airport handle almost 14 million passenger movements.

To celebrate the airport's namesake, the world's first female fighter pilot, Ms. Sabiha Gökçen herself, British Airways opted for an all-female flight crew, with Captain Jessica Telford and First Officer Kerry Bennett operating the inaugural flight.

British Airways' Head of Corporate Sales in Europe, Elisabeth Ruff said: "As we continue our investment programme into new products, services, and technology, we're excited to open up even greater connectivity between two of the world's leading cities, Istanbul and London."

Berk Albayrak, CEO, Sabiha Gökçen Airport, said: "British Airways has become the 45th airline to operate to Sabiha Gökçen and now our passengers can benefit from its extensive global route network. British Airways serves 200 destinations

in more than 65 countries and with their large fleet and renowned services, the addition of this route will undoubtedly further enhance the travel experience of our guests."

British Airways customers have access to one of the world's most extensive flight networks, both domestically and internationally, offering flights to and from central airports at convenient times and through its sustainability programme, BA Better World, the airline is committed to achieving net zero carbon emissions by 2050.



flydubai Ramps Up Operations for the Busy Summer Travel Period

The Dubai-based carrier grows its network to 120 destinations in 52 countries, supported by ongoing aircraft deliveries, gets ready for the busiest summer to date with a 20% increase in capacity across the network between 01 July and 30 September, compared to the same period in 2022 and grows its network in Turkey to five points served by up to 102 weekly flights.

flydubai plans to ramp up operations for the busy summer travel period between 01 July and 30 September, increasing its capacity by 20% across the network.

Since the start of 2023, flydubai has further expanded its network with the start of operations to St Petersburg in Russia, Pattaya and Krabi in Thailand, Al Qaisumah, Al

Ula, Gizan, Nejran and Neom in Saudi Arabia, Shymkent in Kazakhstan, Ashgabat in Turkmenistan, Mogadishu in Somalia and Milan-Bergamo in Italy.

Ghaith Al Ghaith, Chief Executive Officer at flydubai, said: "we continue to grow our network, launching operations to new underserved routes and adding capacity on existing routes. We have seen a very strong performance since the start of the year, which is a clear reflection of Dubai's position as a global hub for trade and travel and resilience in the face of economic challenges. flydubai's role in supporting the growing economy and strengthening airlinks to the UAE and Dubai continues to grow as we take delivery of more aircraft, create more job opportunities and contribute to Dubai

International's (DXB) position as the world's busiest airport for international passengers for years to come."

"We look forward to our busiest summer on record yet with added capacity and new routes joining the network from June, we are well positioned to cater to the surge in demand for travel and are committed to offering our passengers more options and reliable services. We also expect good inbound traffic to Dubai as our city has long moved away from its seasonal offering to being an attractive year-round destination," added Al Ghaith.

Strong performance and growing fleet

flydubai will grow its capacity across the network

by 20% between 01 July and 30 September 2023, compared to the same period in 2022.

flydubai has grown its fleet of Boeing 737s to 78 aircraft serving its expanding network. To support this growth trajectory, flydubai is currently undergoing a recruitment drive to add more talented professionals to its workforce and this includes pilots, cabin crew and various positions across the business.

Growing network

flydubai has built an expanding network of 120 destinations in 52 countries, more than 75 of these routes did not previously have direct air links to Dubai or were not served by a UAE national carrier from Dubai.

Hamad Obaidalla, Chief Commercial Officer at

flydubai, said: “we are pleased to see our operations reach new heights with nine destinations joining our network this summer. This includes popular destinations such as Bodrum, Dubrovnik, Mykonos, Santorini, Tivat and Trabzon as well as new destinations including Corfu in Greece and Olbia in Sicily. We will also increase the flight frequency on a number of routes including Krabi, Milan-Bergamo, Pattaya and Pisa to name a few which have proven very popular for travellers from the UAE and across our network. Passengers continue to enjoy seamless connections on the flydubai network or through our codeshare partnership with Emirates whether they are travelling in business or economy.”

flydubai operations to Turkey

flydubai started operating to Turkey in 2010 with the launch of flights to Sabiha Gökçen International Airport (SAW). Today, the Dubai-based carrier has grown its network to five points in the market including Ankara Airport (ESB), Bodrum Airport (BJV), Trabzon Airport (TZX) as well as Istanbul International Airport (IST).

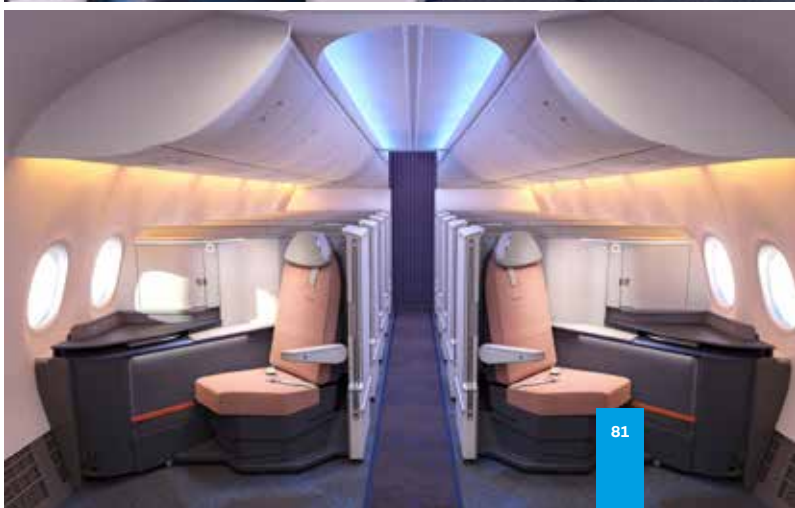
During the peak travel period between June and September 2023, flydubai will operate up to 102 weekly flights between Dubai International (DXB) and the five points it serves in Turkey enabling more people to travel conveniently over the holiday season. These direct flights to Turkey are popular for passengers from the UAE as well those connecting from India, KSA and Pakistan and further afield on the combined flydubai and Emirates joint network via the codeshare agreement.

Product Innovation

Earlier in May 2023, flydubai unveiled its latest premium business class seat, offering passengers added comfort, privacy and an exceptional onboard experience.

The Business Suite, designed exclusively for single-aisle aircraft, is the latest evolution in flydubai’s Business Class offering which will see 10 suites introduced to a number of the carrier’s newest aircraft before the end of 2023. The new seat will offer all passengers in Business Class direct aisle access, which rivals the Business Class experience on board many wide-body aircraft.

Nine destinations Mykonos, Olbia, Corfu, Tivat, Trabzon, Bodrum, Dubrovnik, Santorini and Bodrum will start from 21 June 2023 and end 10 September 2023.





Qatar - The Hidden Gem of the Middle East

As an aviation aficionado, it's a certainty that you're already familiar with Qatar Airways, the only airline in the world to be named Airline of the Year seven times by Skytrax, and Qatar's Hamad International Airport, ranked the 'Best Airport in the Middle East' at the Skytrax World Airport Awards 2023 for the ninth time in a row.

But it was perhaps only when the nation hosted the FIFA World Cup Qatar 2022™ that travellers everywhere finally understood Doha isn't just a seamless transfer hub; it's also the gateway to a

remarkably inviting holiday destination.

In the past years Qatar has launched countless new cultural attractions, shopping districts, family-friendly theme parks, and immaculate hotels that range from the homely to the unfathomably lavish.

One the most illustrative of the country's landmarks is the National Museum of Qatar, whose sinuous golden facade is inspired by the crystalline desert rose that lies in the dunes beyond Doha. The museum's exhibits catalogue a hardy history, when earlier Qataris subsisted from pearl fishing and Bedouin tribes roamed

the country's plains by camel.

Nowadays, this same desert is a playground where adventurers gather under endless blue skies to enjoy 4x4 dune bashing, sandboarding and paragliding. A surreality, the Inland Sea is one of the only places on Earth where towering dunes plummet straight into turquoise waters. Elsewhere, the coastline offers world-class kitesurfing, and opportunities for kayaking, jet-skiing, whale-shark watching and good-weather-guaranteed beach days. You're never more than an hour from the seaside

either - this petite peninsula is fringed by 563km of silken strands.

Back in multicultural Doha, every conceivable dining experience awaits. The air is fragrant with fresh spices at Souq Waqif market, where families gather at affordable outdoor cafés to share sizzling shawarmas and mountains of hummus; at Al Maha Island's restaurant and beach clubs, DJs play as friends sample dishes from all over the world; as dusk draws over West Bay's skyscrapers, couples ascend to rooftop restaurants for fine-dining feasts and showstopper views.



with plenty more innovative attractions and events in the future. This year alone is still to see the Formula 1® Qatar Airways Qatar Grand Prix 2023 thunder through Lusail International Circuit; The Geneva International Motor Show Qatar showcase awe-inspiring automobiles in Doha; and all things horticultural and ecological take centre stage at Expo 2023 Doha, Qatar. This truly is a new era for Qatar, and there's never been a better time to experience the best of the country.



That diverse offering - with everything so easily accessible and often surprisingly affordable - means the nation's popularity has only grown since the tournament. Over a million visitors arrived in the first quarter of 2023 and Qatar Tourism is determined to welcome 6 million international visitors a year by 2030.

That figure is about double the country's population, but it's a key objective of the government-backed Qatar Tourism Strategy 2030. That ambition means Qatar will aim to draw in holidaymakers





Malaysia's SKS Airways Selects Embraer's E195-E2 to Drive Growth

Malaysia's SKS Airways has chosen the Embraer E195-E2, the world's most efficient and quietest single-aisle aircraft, to drive its growth plans for the region. The deal for 10 E195-E2s was announced at a signing ceremony at the Langkawi International Maritime & Aerospace Exhibition (LIMA'23). The E195-E2s will form the core of SKS Airways' expansion plans and will be based at Kuala Lumpur's city airport, Subang, from 2024. The E195-E2 jet has a range of 2,600nm, the equivalent of about seven hours of flight. The aircraft will be comfortably configured with 136 seats.

SKS Airways will be the first E195-E2 operator in the Southeast Asian region, growing Embraer's E-Jets presence in the broader Asia Pacific region which

currently stands close to 200. The lease agreement signed between SKS Airways and Azorra, was witnessed by Yang di-Pertuan Agong of Malaysia, His Majesty Sultan Abdullah ibni Sultan Ahmad Shah, Minister of Transport YB Tuan Loke Siew Fook, The Ambassador of Brazil to Malaysia H.E. Ary Norton de Murat Quintella, Embraer's Johann Bordais, President & CEO of Embraer Services & Support, and Martyn Holmes, CCO of Embraer Commercial Aviation.

Dato' Rohman Ahmad, Director of SKS Airways, said, "This is a significant day for the future of aviation in Malaysia. We are delighted to announce the successful signing of these agreements with leading industry players like Embraer and Azorra who share our vision for the future of air travel. With these strategic partnerships, we

are excited to embark on a new phase of growth, with a fleet of Embraer's Jets operating out of Subang. The prevalence of the E-Jets at city airports around the world and the low noise emissions of the E195-E2 makes the aircraft a perfect fit for flights in and out of Subang Airport – supporting the Government's aim to establish Subang Airport as Malaysia's premium city airport and aviation hub."

Martyn Holmes, Chief Commercial Officer, Embraer Commercial Aviation, said, "The E2 is the aircraft family of choice for airlines around the world seeking to develop their regional routes. As the most modern and efficient single-aisle aircraft, the E195-E2 will deliver a step change for our first Malaysian operator, SKS Airways, as it grows regional connectivity within Malaysia

and beyond. We welcome SKS Airways to the Embraer family and we look forward to growing our collaboration and partnerships in Malaysia as the country continues to develop as a major aerospace hub."

"We are pleased to partner with SKS Airways on this unique opportunity to be a part of the future expansion of Subang Airport. We believe Embraer's new technology E2 is the perfect fit for a redeveloped, premier aviation hub near the heart of Kuala Lumpur, reducing travel times and improving connectivity in the region. The E2's fuel efficiency, carbon footprint and low noise emissions offer a transformative, environmentally conscious jet solution for the city, the region, and its residents", said John Evans, Azorra's CEO.

Turkish Airlines Rises to 8th Position in the Ranking of the Strongest Airline Brands



The international leading brand valuation organization Brand Finance has completed its 2023 research on the Strongest Airline Brands of the world. Turkish Airlines ranked 8th with 78.1 points.

Flag carrier which was in the 31st position in this category in 2022, gained significant momentum and entered the top 10 this year.

On the flag carrier's rise in the rankings, Turkish Airlines Chairman of the Board and Executive Committee Prof. Dr. Ahmet Bolat said: "We are proud to have risen to 8th place in the Strongest Airline Brands ranking among global airlines. We are particularly pleased to have raised our brand ranking by 23 steps compared to 2022. I would like to thank all my colleagues who have

contributed to this success. With the responsibility of being our country's national flag carrier and the power of being the airline that flies to the more countries than any other airline in the world, we will continue to carry our brand to many more successes."

Brand Finance, one of the world's leading independent brand valuation and

consulting companies, has been aiming to bridge between marketing and finance since 1996. The company, which has been calculating the financial value of brands for over 20 years, evaluates the world's largest 5,000 brands every year and prepares approximately 100 reports annually by ranking these brands based on country and sector.

Air Algérie Orders Five A330-900s and Two A350-1000s, Reaffirming its Historic Partnership with Airbus

Air Algérie, the national airline of Algeria, has signed a firm order for seven widebody aircraft to support its commercial development.

This order will allow Air Algérie to take full advantage of the flexibility of the Airbus product range, strengthen its regional services and offer an ambitious plan for transcontinental destinations. By operating the A330neo alongside the A350-1000, Air Algérie will also benefit from operational savings such as a 25 percent lower fuel burn per

seat and greater flexibility resulting from the unique commonality between members of the Airbus aircraft Family.

The A330neo and the A350 also feature the award-winning Airspace cabin, which offers passengers a high level of comfort, ambiance, and design. This includes more individual space, enlarged overhead bins, a new lighting system and access to the latest in-flight entertainment and connectivity systems.

The A330neo and the A350



are the latest generation of Airbus widebody aircraft.

The A330neo Family is powered by the latest generation Rolls-Royce Trent 7000 engines, the A330-900 is capable of flying 7,200 nm / 13,334 km non-stop. By

the end of April 2023, the A330 Family had 1,775 firm orders from 130 customers worldwide. This makes it the most popular widebody family ever, dominating the short- and medium-haul market.



Philippine Airlines Selects A350-1000 for Future Long Haul Fleet

Philippine Airlines (PAL) has signed a Memorandum of Understanding (MoU) with Airbus for the purchase of nine A350-1000s. Under the Philippine carrier's Ultra Long Haul Fleet project, the A350-1000 will be operated on non-stop services from Manila to North America, including to the East Coast of the US and Canada. The new aircraft will join two A350-900s already in service at the airline and currently flying to destinations in North America, Asia and Australia. As with the A350-900, the PAL A350-1000s will be configured in a premium layout with separate Business Class, Premium Economy and Economy Class cabins.

Captain Stanley K. Ng, President and Chief Operating Officer of Philippine Airlines, said that the range of the A350-1000 would enable

the airline to fly non-stop transpacific and transpolar routes in both directions all year. These will include some of the longest commercial flights in the world, such as those linking the Philippines with New York and Toronto. With an expanded A350 fleet, PAL will have the ability to once again provide a direct link from the Philippines to Europe.

"The A350-1000 combines greater range capability with the higher capacity we need to serve future demand. It's the perfect aircraft to enable PAL to meet its expansion plans in a sustainable way, while offering passengers the highest levels of onboard comfort. We are committed to offering our passengers the best possible travel experience, and these state-of-the-art aircraft will enable us to do just that as we carry out our mission

to connect the world, and grow trade and tourism."

Christian Scherer, Airbus Chief Commercial Officer, said: "Flying passengers farther and in greater comfort, the A350 brings a step-change in fuel efficiency and an immediate significant contribution to reduced emissions. These are the attributes that have made the A350 the choice of leading airlines worldwide. We look forward to working closely with our long-standing customer Philippine Airlines as it moves forward with its long haul fleet modernisation programme."

The A350 is the world's most modern and efficient widebody aircraft and has set new standards for intercontinental travel. It offers the longest range capability of any commercial airliner in

production today and is capable of flying 8,700 nautical miles or 16,100 kilometres non-stop.

At the end of April 2023, the A350 Family had won 928 firm orders from 54 customers worldwide, making it one of the most successful wide-body aircraft ever. Some 530 aircraft are currently in the fleets of 40 airlines, flying primarily on long haul routes. Philippine Airlines operates various Airbus types on its full service network. In addition to the A350 on long-haul intercontinental routes, PAL flies A330-300s on services to the Middle East, Australia and various points in Asia. The Philippine flag carrier also operates a fleet of A320 and A321 single aisle aircraft on its extensive domestic and regional network out of hubs in Manila and Cebu.



IndiGo's Iconic Livery Takes Flight on Boeing 777 Aircraft

IndiGo, India's leading carrier has revealed its vibrant livery on the newly introduced Boeing 777 aircraft, servicing the Delhi-Istanbul route. The B777 aircraft landed in New Delhi on May 28, 2023 wearing the airline's white and blue livery.

The Boeing 777 aircraft has the seating capacity of 400 passengers in a dual class configuration. IndiGo passengers flying aboard this aircraft will also be able to pre-book hot meals.

Through its codeshare arrangement with Turkish Airlines, IndiGo is providing connectivity to 33 European destinations which includes countries such as Bulgaria, Spain, the Netherlands, Greece, Belgium, Hungary, Denmark, the Republic of Ireland, the United Kingdom, Malta, France, the Czech Republic, Israel, Austria, Switzerland, Italy, Portugal, and Edinburgh.

These flights will cater to business and leisure travellers who are constantly on the lookout for new and affordable flying options to access destinations which help in building businesses and are known for their tourist attractions. Additionally, with the admission season closing in, these flights will benefit Indian students traveling to Europe for educational purposes.



airBaltic Receives its 42nd Airbus A220-300 Aircraft

The Latvian national airline airBaltic welcomed its 42nd Airbus A220-300 jet On May 27, 2023, registered as YL-ABP, in Riga. This was the third Airbus A220-300 delivery for airBaltic in 2023. It is a part of the 50 Airbus A220-300 which airBaltic has ordered. In addition, airBaltic holds 30 options and purchase rights for the same aircraft type.

Thus far, airBaltic has carried more than 11 600 000 passengers on the Airbus A220-300 aircraft. Airbus A220-300s of the airline have completed nearly 133 000 flights and flown over 289 000 block hours.

Since May 2020, airBaltic operates all its flights with a single aircraft type – Airbus A220-300, thus minimizing the complexity and benefiting from the additional efficiency provided by the aircraft.

The Airbus A220-300 has performed beyond the company's expectations, delivering better overall performance, fuel efficiency and convenience for both passengers and the staff. This aircraft offers an excellent flying experience with such benefits for passengers as wider seats, larger windows, more hand luggage space in the cabin, improved lavatories and much more.

The Airbus A220-300 has a high-quality air filtering system equipped with High Efficiency Particulate Air (HEPA) type filter that provides the best level of filtration currently available for recirculated cabin air from the very beginning of boarding, during entire flight and until all passengers have left the aircraft. The quality of cabin air is carefully controlled and is recirculated with ventilation rates that provide a total change of air 20-30 times per hour.

In addition, the aircraft is also considerably quieter – with a four times smaller noise footprint. Moreover, at the moment it is the greenest commercial aircraft in the world, as it is the first aircraft to have a transparent declaration of the life-cycle environmental impact, helping to reduce CO2 and NOX emissions by 20% and 50% respectively.



GE Aerospace to Invest Up to \$20 Million in EPISCenter to Support Hybrid Electric Aircraft Engine Development

GE Aerospace announced plans to invest up to \$20 million to add a new test cell and equipment at the Electrical Power Integrated Systems Center (EPISCenter) in Dayton, Ohio, to meet increased demand for hybrid electric aircraft engine component testing in coming years.

NASA recently selected GE Aerospace to develop an integrated, megawatt (MW)-class hybrid electric propulsion system as part of the Electrified Powertrain Flight Demonstration (EPFD) program. Plans for EPFD call for ground and flight tests of the hybrid electric system this decade, in collaboration with Boeing, using a modified Saab 340B aircraft and GE's CT7 engines. NASA also previously awarded GE Aerospace a contract for the Turbofan Engine Power Extraction Demonstration under the Hybrid Thermally Efficient Core (HyTEC) project. The EPISCenter

facility improvements will support testing for GE Aerospace's expansive development of next-generation propulsion technologies in which electrification is key.

"The future of flight is more electric. GE Aerospace has been developing the building blocks for hybrid electric engine technologies for years, combining our world-class propulsion engineering, electrical power generation, and electrical power system management experience. Our new investment in EPISCenter to support hybrid electric engine testing affirms our commitment to the development of game-changing technologies for the aviation industry," said Mohamed Ali, vice president of engineering for GE Aerospace.

GE Aerospace has collaborated with NASA for decades on development of new aviation technologies.

"NASA has a long

history of supporting and advancing aviation research, and we're currently working together with industry to usher in the next commercial air travel revolution," said Tim McCartney, director of aeronautics research at NASA's Glenn Research Center. "Single-aisle aircraft are the biggest contributors to aviation emissions. That's why NASA Aeronautics is partnering with U.S. industry to enable next generation single-aisle aircraft with at least 25 percent more fuel efficiency by the 2030s."

The 138,000-square-foot EPISCenter was opened in 2013 on the University of Dayton campus, representing a \$53 million investment at the time to help advance the development of more electric aircraft. Since then, another \$26 million has been invested in facilities and equipment. The additional investment announced today brings total planned capital spending

on the EPISCenter to nearly \$100 million, building on the site's existing research and testing efforts of end-to-end electrical power starter and generation, conversion, distribution, and load technologies for military and civil aviation applications.

"As we approach the 10th anniversary of opening EPISCenter, the growth has already outpaced our original expectations for electrical systems development and testing," said Joe Krisciunas, president and general manager of electrical power systems for GE Aerospace.

Along with the opening of EPISCenter, GE Aerospace has achieved several technical milestones over the last decade for development of a hybrid electric propulsion system. In 2022, GE Aerospace completed the world's first test of a MW-class and multi-kilovolt (kV) hybrid electric propulsion system in

altitude conditions up to 45,000 feet that simulate single-aisle commercial flight. This test took place at NASA's Electric Aircraft Testbed. Leading up to last year's milestone, GE Aerospace had been maturing hybrid electric propulsion systems through a series of increasingly complex steps including a 2016 ground test.

Currently, GE Aerospace is developing next-generation technologies as part of the CFM RISE* (Revolutionary Innovation for Sustainable Engines) program, unveiled in June 2021. The RISE program encompasses a suite of new aviation engine technology development including hybrid electric capability for more than 20% improved fuel efficiency and 20% fewer CO2 emissions compared to today's engines.

In another program with Sikorsky called Hybrid-Electric Demonstrator (HEX), GE Aerospace is offering a CT7 turboshaft engine combined with a 1 MW-class generator and associated power electronics. This fully autonomous hybrid-electric vertical-take-off-and-landing prototype will be used as a testbed to evaluate new aircraft design, propulsion systems and control architectures for utility missions for military and commercial applications.

Hybrid electric propulsion technologies can help improve engine performance, reducing fuel usage and emissions. More information on how GE Aerospace is innovating to help the aviation industry reach its target of net zero CO2 emissions by 2050, including a link to GE's 2021 Sustainability Report, is available at www.GEAerospace.com/Future-of-Flight.

* RISE (Revolutionary Innovation for Sustainable Engines) is a trademark of CFM International, a 50/50 joint company between GE and Safran Aircraft Engines.



ATR Set for Growth in 2023

After three difficult years due to Covid and a complex economic and geopolitical environment, ATR is set for growth in 2023. In the context of industry-wide supply chain issues, ATR delivered 25 new and 11 pre-owned aircraft in 2022. Nonetheless the global ATR in-service fleet is now close to pre-Covid numbers with 1,200 aircraft flying, and the current backlog stands at a solid 160 aircraft.

Last year saw 150 new routes created with ATR aircraft. As part of its commitment to decarbonisation, ATR performed the first 100% Sustainable Aviation Fuel (SAF) flight in history with a commercial aircraft, and its brand new PW127XT engine was certified and entered into service. At the same time, ATR successfully advanced the development of its aircraft family, completing the first test flight of the ATR 42-600S (Short Take-Off and Landing) and launching a feasibility study for its next generation EVO concept. These achievements showcase the commitment to connectivity, sustainability and innovation that ATR stands for.

ATR Chief Executive Officer, Nathalie Tarnaud Laude, said: "The goal for 2023 is to maintain our position as the leading regional aircraft manufacturer, by targeting at least 40 deliveries, with the ambition to ramp up production to 80 aircraft in the coming years. With their unbeatable economics, latest technologies and unrivalled environmental performance, ATR aircraft are what customers need to operate their routes profitably, despite inflation and energy uncertainty. What drives us is that sustainable regional aviation has the power to improve lives globally, providing vital connections to communities and economies, which translates into Gross Domestic Product increases and employment."

Now that travel restrictions have been lifted, the company plans to capitalise from the high replacement demand – 1,500 turboprops over the next 20 years –, to tap into underserved markets such as the United States, to increase its footprint on the freighter market, and to explore new opportunities, such as corporate, governmental and humanitarian operations.



Deutsche Aircraft Announces First Launch Customer for Its New D328eco™ Turboprop Aircraft

Deutsche Aircraft and Private Wings are pleased to announce that they have signed a Letter of Intent (LOI) today for the delivery of five D328eco aircraft – the brand new 40-seater sustainable turboprop regional airliner from Deutsche Aircraft. The collaboration was announced during the ground-breaking ceremony for the D328eco final assembly line at Leipzig/Halle Airport on May 16, 2023.

The D328eco will facilitate sustainable regional connections as it offers the lowest fuel consumption and CO2 emissions on the market. This aircraft is designed to operate on 100% SAF power-to-liquid (PtL), which can reduce CO2 emissions by up to 95%.

The outstanding flight characteristics and versatility of the D328eco allow it to reach destinations with short and unpaved runways in challenging weather conditions. This will open up new routes



to connect businesses and people. An integrated Garmin Companion™ flight deck, brand-new PW127XT-S engines and a comfortable and quiet cabin make the D328eco turboprop ahead of its time: an innovative and robust aircraft which offers maximum comfort for passengers and flight crew. The combination of these features sets the D328eco apart as the most efficient, modern and sustainable regional aircraft in its class.

“We see the D328eco as a great addition to our existing fleet of ten Dornier 328 aircraft. The D328eco is a natural step forward for

Private Wings as we look to grow our business and fleet and seek the most operationally efficient yet sustainable solution to meet the needs of the market,” says Peter Gatz, (CEO of Private Wings).

Private Wings, an owner-operated airline based at Berlin Schoenefeld and Ingolstadt Airport, specialises in corporate shuttles as well as charter flights for events and sports teams. Private Wings currently has a fleet of nine Dornier 328 turboprops, a Dornier 328 jet and a Beech 1900D.

“On the occasion of the ground-breaking ceremony

for our final assembly line, it gives us great pleasure to announce that Private Wings, an established German operator and current operator of the D328 family of aircraft, is our first customer for the new D328eco. This partnership is not only an important milestone, but also a clear sign of our long-standing operator's commitment to the D328 fleet,” remarks Anastasija Visnakova, (Vice President of Sales and Marketing at Deutsche Aircraft). “Deutsche Aircraft will continue to support the long-term business goals of sustainable growth and versatile operations at Private Wings,” she adds.

Gözen Digital Aviation

40+ years of expertise turning into Digital Experience

Gözen Digital Aviation (GDA) creates advanced digital solutions for aviation while setting new standards for leading companies in the industry. Backed by Gözen Group's experience since 1979; GDA continues its activities through the vision of accelerating growth in digital aviation, driving enhanced operating efficiencies, and providing end-to-end services in the aviation ecosystem.

Recently acquired from Boeing's Jeppesen; GDA launched the Operator, a web-based flight scheduling

tool consolidating all digital support systems into one seamless solution while targeting operational excellence to meet the unique requirements of AD-HOC operations. On the other hand, Simorg is a unique comprehensive management software for flight simulator centers and training operations designed to enhance efficiency and provide cutting-edge digital ease.

GDA is complemented by its customer-focused 24/7 support team with aviation and technical background



experiences. The company fuses experience with the talented new generation of pragmatic developers, and

committed aviators, making it a wisely growing full-stack technology house.

ABL Aviation Announces Closing of Fourth A321neo to Pegasus Airlines

ABL Aviation, the global independent aircraft investment management firm, is pleased to announce it has successfully completed another delivery of a new Airbus A321neo aircraft for Pegasus Airlines, on behalf of ABL Aviation's Japanese partner, financed through a Japanese operating lease with call option (JOLCO) structure. This aircraft is the fourth A320neo Family unit delivered under the same structure to Pegasus. The transaction follows an April 2020 deal also arranged by ABL Aviation for Pegasus Airlines. Closed at the height of the COVID-19 pandemic, the transaction

marked the industry's first-ever 100% remote delivery of an aircraft.

Commenting, Ali Ben Lmadani, CEO of ABL Aviation, said: "We are thrilled to complete another delivery for Pegasus Airlines with whom we have enjoyed a longstanding relationship. This fourth transaction reflects our strong partnership with Pegasus and demonstrates our commitment to creating tailored solutions and financing environmentally friendly new generation Airbus NEO aircraft to support our customers' growth targets."

Tamer Yüzüak, EVP Finance

and Fleet Management of Pegasus Airlines adds "We are pleased to expand our relationship with ABL Aviation during tough times and good times with the JOLCO financing of this A321neo aircraft. Pegasus Airlines will continue to diversify its financing resources in favour of the new technology and environmentally friendly Airbus NEO family aircraft. We are now operating 97 aircraft as of today, almost 75% of our fleet consisting of new technology CFM LEAP-1A powered A320neo family aircraft. We are among the leading airlines that adopted IATA's "2050 Net Zero Carbon Emissions",

our commitment to grow with environmental friendly new generation Airbus NEO Aircraft family aircraft also contributes to achieve our targets to "Fly Net Zero". Incorporating the latest technologies, the A321neo delivers 20% fuel cost savings alone with its new generation engines and the industry's reference cabin design. The A321neo also offers significant environmental benefits with nearly a 50% reduction in noise footprint compared to previous generation aircraft, helping Pegasus to meet its ambitious sustainability targets, including zero net CO2 emissions by 2050.

RYANAIR to Purchase 150 CFM LEAP-1B-Powered 737-10 Aircraft

Ryanair and CFM International today signed a Letter of Agreement (LoA) for the purchase of LEAP-1B engines to power 150 Boeing 737-10 aircraft. The LoA also includes spare engines and options for 150 additional aircraft.

Ryanair has been a CFM customer since 1998, operating the largest fleet of CFM-powered Boeing airplanes and the largest CFM 56-7B-powered Boeing Next-Generation 737 fleet in Europe. The Irish-based airline currently operates a fleet of 103 LEAP-1B-powered 737-8-200 aircraft.



"We are honored by Ryanair's renewed trust in our products and in our teams," said Gaël Méheust, president and CEO of CFM International. "We look forward to continuing to support Ryanair's fleet development by providing them with the best standards in terms of

reliability, sustainability and maintenance."

Since entering service, the LEAP-1B engine has accumulated nearly 10 million flight hours and 4 million cycles. The advanced CFM LEAP engine family is providing more than

15 percent better fuel consumption and lower CO2 emissions, as well as a significant improvement in noise compared to previous generation engines. Since its entry into service in 2016, the LEAP engine has allowed our customers to save more than 20 million tons of CO2.

Pratt & Whitney GTF™ Engines Power Breeze Airways' Longest Airbus A220 Flight

Pratt & Whitney, a Raytheon Technologies business, joined Breeze Airways ("Breeze") in announcing the launch of the airline's longest nonstop route, a more than 2,250 nautical-mile, Airbus A220 flight powered by GTF engines between Rhode Island's T.F. Green International Airport and Los Angeles International Airport. The celebration began on Tuesday at a first-ever airline employee town hall hosted at Pratt & Whitney's East Hartford, Conn. Customer Training Center for Breeze founder and CEO,

David Neeleman and Breeze president, Tom Doxey.

"GTF engine technology for the A220 has been foundational to the growth and success of Breeze over the past two years," said Neeleman. "We've been able to link new city pairs while reducing operating costs and environmental impact."

The GTF engine is the exclusive powerplant for the Airbus A220 family, which reduces fuel consumption and CO2 emissions up to 25% per seat, NOx emissions by up to 50% and noise footprint by up to 75%.*

Certified for operation on 50% sustainable aviation fuel (SAF) and successfully tested on 100% SAF, GTF engines are capable of further reductions in carbon emissions, which will help the aviation industry meet its goal of net zero emissions by 2050.

"GTF engines enable airlines like Breeze fly long, thin, transcontinental routes with game-changing aircraft like the A220," said Rick Deurloo, president of Commercial Engines at Pratt & Whitney. "The inauguration of service

between Providence to Los Angeles marks a major milestone in the airline's rapid growth."

Located in Salt Lake City, Utah, Breeze was founded in 2018 and launched flight operations in May of 2021. The airline operates 12 Airbus A220-300 aircraft, with the 13th to be delivered soon, and has an additional 66 A220-300s on order. Breeze also operates a fleet of Embraer E190 and E195 aircraft, each equipped with an APS2300 auxiliary power unit (APU) from Pratt & Whitney.



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