

Fiyat: 120 TL - Price: US\$ 5,99

ISSN 2667-8624  
VOLUME 5 - ISSUE 22 - YEAR 2024

# AVIATION TURKEY

**Leonardo  
Helicopters**  
Leader of the  
Turkish Commercial  
Helicopter Market

Turkish Airlines  
**2033 Strategy &  
Fleet Expansion**  
with Historic Airbus Order

Insights from German  
Fighter Pilot Captain  
**Oswald  
Boelcke's  
Diaries**  
A Visit to Türkiye in 1916

An Exclusive  
Interview with  
**Martin Gauss**  
the President & CEO of  
airBaltic





# TIACA EVENT CENTRAL ASIA

*Opportunities for Growth*



MINISTRY OF TRANSPORT  
OF THE REPUBLIC OF KAZAKHSTAN  
CIVIL AVIATION COMMITTEE



AVIATION  
ADMINISTRATION  
OF KAZAKHSTAN

*Silk Road in the Sky*  
Kazakhstan Air Cargo Hub

*Register now to Connect, Discuss,  
and Debate with industry colleagues  
doing business with Central Asia.*

**June 19-21, 2024** ✈  
Astana, Kazakhstan



Visit [tiaca.org](https://tiaca.org)





GELECEĐİNE  
**GÜÇ KAT**

EMPOWER YOUR FUTURE



**T625 GÖKBEY**

GENEL MAKSAT HELİKOPTERİ  
*MULTIROLE UTILITY HELICOPTER*

TUSAŞ - Türk Havacılık ve Uzay Sanayii A.Ş.

TUSAŞ is a public company with 50% state ownership  
subsidiary of TAİH and affiliate of SSB

tusas.com

**TURKISH  
AEROSPACE**

# AVIATION TURKEY

VOLUME 5 - YEAR 2024 - ISSUE 22  
ISSN 2667-8624

## **Yayıncı / Publisher**

Hatice Ayşe Akalın  
a.akalin@aviationturkey.com

## **Genel Yayın Yönetmeni Editor in Chief**

Hatice Ayşe Akalın  
a.akalin@aviationturkey.com

## **Haber Editörü / Editor**

Şebnem Akalın  
sebnem.akalin@aviationturkey.com

## **Çeviri / Translation**

Tanyel Akman

## **Grafik & Tasarım / Graphics & Design**

Gülsemin Bolat  
Görkem Elmas

## **Yayın Danışma Kurulu / Advisory Board**

Aslıhan Aydemir  
Lale Selamoğlu Kaplan  
Assoc. Prof. Ferhan Kuyucak  
Şengür

## **Adres / Address**

Administrative Office  
DT Medya LTD.STI  
İlkbahar Mahallesi Galip Erdem  
Caddesi Sinpaş Altınoran Kule 3  
No:142 Çankaya Ankara/Turkey

Tel: +90 (312) 557 9020  
info@aviationturkey.com  
www.aviationturkey.com

©All rights reserved.

No part of publication may be  
reproduced by any means without  
written permission.

## **Sorumlu Yazı İşleri Müdürü**

### **Managing Editor**

Cem Akalın  
cem.akalin@aviationturkey.com

## **Baş Yazar / Senior Editor**

İbrahim Sünnetçi

## **Haber Editörü / Editor**

Yeşim Bilginoğlu Yörük  
y.bilginoglu@aviationturkey.com

## **Yazarlar / Authors**

Muhammed Yılmaz

## **Muhabir / Correspondent**

Saffet Uyanık

## **Fotoğrafçı / Photographer**

Sinan Niyazi Kutsal

## **İmtiyaz Sahibi**

Hatice Ayşe Akalın

## **Basım Yeri**

Demir Ofis Kırtasiye  
Perpa Ticaret Merkezi B Blok  
Kat:8 No:936 Şişli / İstanbul

Tel: +90 212 222 26 36

demirofiskirtasiye@hotmail.com

www.demirofiskirtasiye.com

## **Basım Tarihi**

Şubat - Mart 2024

## **Yayın Türü**

Sürelî

# content



"The A220-300 is Now Proven to be a Very Efficient Aircraft"

"Turkish Airlines as the Largest Operator of Rolls-Royce's Trent XWB Engines Worldwide"



THY 2033 Strategy & Fleet Expansion with Historic Airbus Order



nts



31

“The Trade Relationship & Collaboration in Aviation Between the United Kingdom and Türkiye”



32

“Qatar Airways is proud to have been flying between Doha and Istanbul for the past 20 years.”



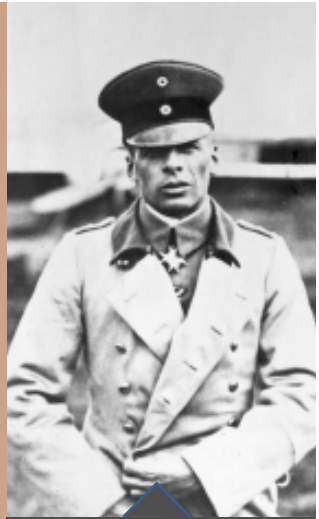
36

Leonardo Helicopters Leader of the Turkish Commercial Helicopter Market



58

Emel Elik Bezaroglu: “We Set Out to Reach 50 Hotels by 2030”



64

Insights from German Fighter Pilot Captain Oswald Boelcke's Diaries: A Visit to Türkiye in 1916



78

Launch of the EU-funded Project SUN-to-LIQUID II Fuels from Concentrated Sunlight



# Soaring to New Heights: Latest Developments in Sustainable Aviation Fuel

Sustainable Aviation Fuel is assumed to deliver the highest emissions savings in the energy transition of the aviation sector to reach net zero by 2050. In recent years, the aviation industry has been undergoing a transformative shift towards sustainability. The latest developments in SAF reflect a dynamic landscape of innovation, investments, and collaborative efforts driving the aviation sector towards a greener future.

According to IATA report released lately, SAF consists of two broad categories: fuels produced

from biomass resources, known as bioSAF, and fuels produced from CO<sub>2</sub> and electricity through synthetic processes, known as synthetic SAF or Power-to-Liquid (PtL). As a 'drop-in' fuel, SAF can be directly used in conventional jet-engine powered aircraft without any changes to aircraft and airport infrastructure (once the fuel has been blended and certified as ASTM 1655 jet fuel).

Despite this unique advantage, in 2023, SAF volumes just reached 0.5 Mt and had a negligible share in total aviation energy use. All the net-zero roadmaps indicate that to be on track to reach net zero by 2050, the share of SAF in total aviation energy demand must be at least 5-6% by 2030. The recent ICAO declaration on the third Conference of Alternative Aviation Fuels (CAAF/3), aims to achieve a 5% reduction in CO<sub>2</sub> emissions by 2030 on international aviation. The ICAO LTAG S3 models the highest share of SAF at 21% by 2030 for international aviation, followed by 15% in the ICCT Breakthrough and the MPP ORE. Notably, for those higher 2030 SAF use estimates, the speed with which infrastructure can be ramped up is also a key constraint for SAF production, given that the number of SAF facilities planned to be built by then may not meet the high SAF demand. By 2050, SAF is expected to account for 65%-100% of the total energy demand for aviation, depending on

whether any other clean energy sources, such as green hydrogen-powered aircraft, are considered in the given roadmap.

How fast SAF can penetrate the global aviation energy supply depends on feedstock availability and SAF production costs relative to fossil jet fuels. Currently, SAF is about 2-6 times more

expensive than fossil jet fuels, and the future prices of SAF remain highly uncertain. Nine roadmaps provide their assumptions on average SAF costs in 2030 and 2050 (in brackets are the average costs of the original values reported in the roadmaps), which shows that SAF prices are anticipated to decline over time. However, how competitive the





SAF prices will become depends also on future fossil jet fuel prices and carbon abatement costs.


The energy transition in the aviation sector will clearly not happen at the same speed or at the same scale. For example, compared to bio-SAF production which is already available at commercial scale, PtL fuels are assumed to be available only from mid-

2020s or 2030 in the majority of the roadmaps. In addition, hydrogen-powered aircraft are largely assumed to enter the market in the mid 2030s with limited range, while battery-electric aircraft will come in about the same time but serve even shorter-range markets

The latest developments in sustainable aviation fuel underscore

a transformative momentum within the aviation industry. The convergence of investments, technological innovations, global collaborations, and regulatory support is propelling the sustainable aviation fuel sector toward a future where environmentally conscious air travel is not just a goal but a reality.

As these developments continue to unfold, the aviation industry is on track to achieve greater sustainability, contributing to a cleaner and greener future for our skies.

Enjoy the issue... 

**Ayşe Akalın**  
Editor in Chief



## “The A220-300 is Now Proven to be a Very Efficient Aircraft”

On January 8, 2024 we had the opportunity to interview with the President and Chief Executive Officer (CEO) of airBaltic, Mr. Martin Gauss, over a Zoom meeting, who shared with us some figures on airBaltic's performance in 2023, explained how did they manage to achieve positive results in 2023 despite the problems experienced with the PW1500G engines and the negative impacts of the Russia-Ukraine War, as well as airBaltic's targeted fleet structure and how did they see Türkiye's position in airBaltic's future business projection.

**Aviation Turkey:** First of all, thank you for sparing time for our readers. Can we start our interview by getting an overview of 2023 from airBaltic's point of view? Can you elaborate on airBaltic's performance in terms of the number of passengers, revenues, profitability, destinations and fleet?

**Martin Gauss:** We're not reporting the full-year figures, but I can give guidance on the passenger side. Our nine-month results were 3,4 million passengers, and we will go about 4 million, of course, by the end of this year. However, what we had formally for the nine-month result was 3,4 million passengers. We gave guidance that it will be more than 4 million and, in this number, the important part is we also fly more than a million passengers for other airlines leased out for Lufthansa group as we did last year and will also do this year, so our productivity

is significantly higher. The total passenger carried by us is larger than that. On the revenue side, we exceeded for the first time in the nine months €502 Million, and we gave guidance that it would be more than €650 Million in revenue before the full year. The final numbers here will come when the full-year results in March 2024.

On the flights, we had reported 32,000, and these are only the commercial flights in the first nine months, which will also be significantly higher because of all the flights we did for others. On destinations, we have more than 100 destinations now it rises between summer and winter, but always more than 100 destinations and more than 120 routes from our four bases, well five now because we have a temporary base in Gran Canaria and our fleet, reached 46 only Airbus A220-300 by the end. We announced at the Dubai Airshow another 30 + 20 orders,





which took us to the largest A220-300 operator in the world. That was a big announcement for us from a small country. This was because we would have our 50th aircraft coming already this year, and then we would have no more aircraft to come in the future as we have a very successful business model. It was natural that we would, going forward, order more aircraft, and as we focus only on the A220-300 as the only aircraft we want to operate, with that limiting, of course, our business model to the range of this aircraft. We decided to order another



30 + 20 purchase, enabling us to grow to 100 aircraft by 2029. So that's the current plan.

We had other highlights last year, of course, impacted still by the war between Russia and Ukraine as being at the border of Belarus and Russia, and we need to circumnavigate already now since the war broke out all the areas, which makes flying significantly longer to everything we fly southeast. We have our own, airBaltic-operated flights to and from Istanbul and they are in codeshare with Turkish Airlines. We have a long history in Türkiye, a long history of passenger transport, and a long history in Istanbul because we had it in 2005 and reopened it now, but we fly a lot of charters. It's a very popular destination. So that is something new here. On the passenger side, last year, we had thousands of passengers on the Istanbul route, where the majority of the passengers sit in Turkish. They have a higher frequency than us, but we

are happy with the route because the coach gives us the point of traffic. Most importantly, Istanbul is now one of the key hubs where you can transfer. It's very popular among passengers who use Istanbul as a transfer hub, so it is a must-have destination today if you are a European carrier. We have that destination, and we are very happy with it.

The war still impacts us, and then another big highlight last year was when we started wet-lease out operations with our A220-300, and this wet-lease out is not done as a white-label aircraft. We have the airBaltic aircraft flying; for example, we had an aircraft in Zurich flying Swiss, Lufthansa group member, and it is our crew in their uniform. It is our aircraft; we just do the on-board services as the Swiss would do it, and our crews are a maximum of one week in operation for the partner airline, which means they are trained to do our service, and seamlessly they can

do the other service as well, and that helps us. We established ourselves as a premium wet-lease provider because we have a business class cabinet in the front of the aircraft, a full-service business class cabin to European standards, and an ultra-low-cost cabin in the back. That's why when we fly for SAS and Lufthansa group for their premium brand, we have the ability to do that to a very high satisfaction because we get feedback from the wet-lease partners that we serve. We are doing this at a very high level. We keep this business because the aircraft is a 150-seater, which is perfect for a lot of areas because they normally don't have aircraft of this size. Either they have smaller ones or their standard equipment is larger, and therefore, we operate with a unique aircraft type in a market that is significantly growing. If we look at our order book, we see that the biggest part of that market is secured because we have 150 seaters in our fleet.



On top of that, if you normally do a wet-lease operation today, then you get an 18-year-old 737 or a 20-year-old A320 flying for you, which comes with significantly higher fuel and emission costs. And suppose you fly with an airBaltic as a wet-lease. In that case, you get the most modern aircraft with a 30% reduction in fuel and emissions, which means the cost of operating it for the partner is also significantly cheaper comparing it to another 150 seater, which today would be a A319ceo. Because the A319ceo, or 737-300, would be equivalent, and I don't think there are any 737-300s around anymore, or even a 700 would not be as fuel efficient.

So that second arm was the very profitable one for airBaltic last year. Overall, as far as we know it, it has been a record year and will be a record year for airBaltic, so we know detailed numbers will be available after the audit, but we know it was a record year for us in

our history, 28 years. We are now focusing on a potential listing of the company at the stock exchange, which is maybe then, historically, the biggest thing we have done as it comes with growth. But it also comes with new shareholders and equity where people say, OK, we like that business model and continue to invest.

**✈️ Aviation Turkey: How did airBaltic manage to achieve its positive results in 2023, despite the problems experienced with the PW1500G engines and the negative impacts of the Russia-Ukraine War?**

**Martin Gauss:** So, on the war impact, in 2022, we did a calculation of how much money we lost because of

the war breaking out, and at that time, it was just a direct impact of €72 Million to our revenues, so very significant as we had at that time 10% of our revenues coming from Russia and Ukraine. We had the aircraft. We were flying Odesa, Kyiv, and Lviv in Ukraine, and in Russia, we were serving high frequency to San Petersburg, Moscow, Sochi, and Kaliningrad. This all stopped but did not prevented the growth of taking on aircraft. Then, we opened more destinations to the west, which was difficult to start in 2022. But it worked very well in 2023, and we gave aircraft to others and started the wet-lease operation. So, not completely, but it offset the impact. We haven't reached the passenger numbers we

had in 2019 because of the missing passengers from the east, on top of the direct missing passengers with all the transfers we used to carry from Riga to these eastern destinations. We also couldn't fly to Yerevan and Baku in 2022, but all of that came back in 2023, helping us because these are connecting routes from Riga. So, if you come from Scandinavia or you're coming from southwest Europe, then sometimes we have the best connectivity to these places geographically, and therefore, they are back. Most of them are back.

The engine issue actually got worse last year compared to the year before. We were missing more engines in the peak summer than expected and had to ground up to 14 aircraft. We stopped leasing aircraft ourselves while giving our aircraft to others. Because the short-term needs of not having sufficient engines back then can only be offset with a short-term wet-lease.

People ask me in public why I am flying my new aircraft in Lufthansa Group, and then I'm bringing these old aircraft to fly in airBaltic. We had a lot of complaints from the passengers because of that. Until October, when the winter schedule came, we got a lot more engines. We came to a point where we only have three aircraft on the ground compared to 14 last year in the summer, but we are already going into the summer knowing that the engine situation will worsen again. We know that because of additional problems on the PW engines, which over the next two years will have to be modified, that affects not only the A220 but also the A320 family even more. However, it is part of our business plan, and last year, we had to offset this with a costly wet-lease operation. That is disturbing profitability. Without that, we would have had much better results.

This engine issue will be fixed one day, just like any aircraft that has issues. These engineering issues will be fixed one day. Then you can imagine if you would have even better results in these times and how good the results will be in the future. Therefore, we are very positive and able to explain to investors that, 'Look, we are already performing at a very good level with these issues. Can you imagine how good we



would be if these issues were solved?' That helps us to sell our model. Because the model is unique in Europe, and it works very well for us. So yes, it was tough last year but still a record year, and I'm very proud, honestly, to have steered the airline out of Covid and out of the war to make it now the largest A220-300 operator in the world with high recognition. If we look at the operating margins, we are ranked in the world as one of the top 20 airlines. So, somehow, we did a lot of things right, and I hope we can build on that success in 2024 and then take the airline to a proper capitalization because our negative equity is still there. It can't be fixed by our current shareholder because, according to EU rules, that would be state aid. Therefore, we will have to go through private capitalization with an IPO and, with that, finally fix the equity issue.

**✈️ Aviation Turkey:** While answering our first question, you underlined that you currently have 46 aircraft in your fleet, and you will get the remaining four by the end of this year. What can you tell us about airBaltic's targeted fleet structure and number of destinations for the end of 2024?

**Martin Gauss:** We will fly more than 50 aircraft because we are already trying to bring outsourced aircraft. It is not finalized, but that is to bridge the gap until our new order comes, so we have an RFP (Request for Proposal) out there for leasing companies, and we expect more than 50 aircraft already this year. Usable aircraft will be less because of engine issues, so we will also seek wet-leasing capacity from others for the peak summer so that we can fulfill our business plan. The destinations will grow. The final numbers, I can say, are only at the end of the

year because we normally announce new seasonal destinations. Not all of them have been published yet, but we will be well above 100, and it will be more than it was in the year 2023. We have not announced anything other than our three Baltic bases, Vilnius, Tallinn, and Riga which is a hub. We will continue Tampere, and Gran Canaria was a winter base that will finish in April. That is as a temporary base. Otherwise, we have also contracted out aircraft to fly wet-lease for others here in the Lufthansa Group as last year. With this, we are set up to go, and now, the first week of the year, it is about getting the organizations. I think every organization is warming up for the beginning of the year, and very soon, we will see the traditional increase in booking performance in European airlines around February and March, which will give a good base for the summer to come.





**Aviation Turkey:** When will the first delivery of your second order of 30 aircraft take place?

**Martin Gauss:** The first one is at the end of 2026. Q4 for 2026, and then they will come pretty fast. So, we are getting aircraft, and now, assuming that we agree with the lease source, we will have a continuous stream of aircraft coming in.

**Aviation Turkey:** So, you will lease aircraft from other sources to close that gap?

**Martin Gauss:** Yes, but usually, what we do with the aircraft we purchase is we lease it back like the standard today in the world. However, we will also do a lease source with new A220 aircraft orders coming from

them. For the public, there is no difference, right? It's an airBaltic aircraft, leased normally for 12 years. Whether it is a lease back or a direct lease from us, it's the same; the total number of aircraft targets is 100 by 2030.

**Aviation Turkey:** You have been at the helm of the Latvian flag carrier airBaltic for 12 years, and during this period, you have made several impactful decisions that led the airline to become a profitable company. One of those impactful decisions was for the airline to become a single-fleet operator by placing an order for the then-Bombardier CSeries CS300 (now A220) to replace Boeing 737 and Q400 aircraft in the fleet. What can

you tell us about the consequences of your decision to become a single-fleet operator? Are you satisfied with this decision and Airbus A220, and will you continue this practice in the coming period? In one of your preview interviews, you underlined that there is a requirement for 100 aircraft in your fleet. So, do you plan to procure more A220 aircraft or other types of aircraft in the future?

**Martin Gauss:** I'm happy with the decision of A220-300 because it gave us the chance to demonstrate the cost space that we have today, and it would not have been possible if we had taken a larger aircraft. I mean, of course, there is peak summer. We could

have up to 10 aircraft, which are larger and could fill them in the peak summer, but we would not be able to fly the profitable all year round because of the model we fly. While our main competitor, is flying larger aircraft. One of the reasons why we can compete so well against them is having the right size aircraft. Therefore, the decision to purchase a 150-seater aircraft was very good. The A220-300 is now proven to be a very efficient aircraft. If we look at engine issues, something that is present in all new aircraft to a certain extent, Even if we look at the 737 Max, after they had all the aircraft grounded, the problem was that they had no issues on engines because the aircraft wasn't flying. So they could build



engines and engines. Now, while the aircraft is flying more and more, the new engine technology needs to be modified. So, all new aircraft have a similar situation. Also, from that perspective, the A220 was the right decision because the alternative would have been the 737 Max, which nobody would buy or hardly anybody buys, or the A319, which also is not sold. So, I think we made the right decision here because no alternative is being sold.

**Aviation Turkey:** Do you plan to procure the Airbus A321XLR or a stretched version of the A220, such as the A220-500?

**Martin Gauss:** We said we are interested in if Airbus develops a stretched

version because that could help us fly the same type with more seats. But there is no commitment, and there is no clear timeline. On the A321XLR, that discussion comes up again and again because of direct access to the US, mainly New York, which is missing from the Baltic states. There is no direct flight from the Baltic States to the US, and we see from the numbers today that we could operate that route with the right aircraft. The problem is that the A321XLR, as it stands today, would not be unrestricted and able to fly that route. So, we are still in a situation where there is no aircraft type that is good for that route, and therefore, the discussion always comes up on the A321XLR. Even the Riga, New York, is a little bit too long for that aircraft to be flying with the configuration we would need. So, the only alternative would be a wide body, which does not make sense because the businesses wouldn't work. That's why the discussion is there. So, if you ask me now, is there any plan to change the fleet? No, we continue flying the aircraft the way we do today. But of course, we've seen in the last years so many changes from the outside nearly every year, a major change, starting with, first, the financial crisis, then Covid, then the war. Now we have even two wars in Gaza and in Ukraine. So, we don't know what the future holds, and

therefore, we need to be able to adjust, which means we have a very clear plan. We have an order book to continue what we do today, but we also showed that we could adjust in a very fast time. Therefore, I would say when the need arises for a different aircraft type, then that would be a need coming from outside, something we don't know today.

**Aviation Turkey:** airBaltic commenced its round-trip flights connecting iGA Istanbul Airport and Riga International Airport on Sunday, April 2, 2023. You mentioned that Istanbul is one of the key hubs and a must-see destination for you. Do you plan to open new destinations in Türkiye in 2024?

**Martin Gauss:** We cannot do that because of the bilateral restrictions. The countries would have to agree on opening new destinations, such as Latvia based on the Riga. There wouldn't be an interest, I assume, from Turkish Airlines (THY) or another Turkish airline to operate to another destination in Latvia, and therefore, we are restricted to Istanbul as a destination. Apart from flying charters, of course, which we do to different destinations. There is no option for us due to bilateral restrictions.

**Aviation Turkey:** airBaltic first launched flights between Riga and Istanbul in March 2005,

initially on a four times weekly basis using a Boeing 737-500. Could you give us a projection of your experience in Türkiye, Istanbul, since 2005?

**Martin GAUSS:** The load factor was not yet the lowest factor you have for an established route. It has been 70-75%. This route will have to be profitable for us; otherwise, we will have to stop it. But if you look at the development of Istanbul Airport and the connectivity there, I have no doubt until geopolitical issues put a break to it. I use the airport myself a lot. It is a perfect gateway similar to Dubai and Qatar, and with the positive development of Turkish Airlines there, we will have more and more connectivity for passengers. As we fly in codeshare with Turkish Airlines, I think the product on the Riga-Istanbul route is very good, and that should enable all carriers on that route to grow their passenger. So, that's our expectation, and of course, I hope that the year 2024 is the second year, we will also benefit from the growth on that route. But the first year, as we started in April, was not yet at the load factor which we expected. However, that's normal because it is a new route, and there is competition while at the same time a coacher partner, which means that they are also trying to sell the tickets, which is normal. And you can of course buy

## INTERVIEW



a ticket for Turkish Airlines or airBaltic. Also, Turkish Airlines, operating on the route for a longer time, has a better market share, and probably because they fly more frequently, they will continue. They also have more seats.

### **✈️ Aviation Turkey: Can you elaborate on your short- and long-term objectives and vision for Türkiye?**

**Martin Gauss:** Actually, there is no further vision possible because we can only increase frequencies as the route performs better. However, we cannot take another destination into consideration. But I think the perspective of Istanbul as a strong hub to the east for us, that is, not us flying but the Turkish Airlines flying as our partner, is something we want to develop further. That means the discussions with Turkish Airlines on putting the code on having passengers transferring in Istanbul is a discussion. We want it to happen with that route. On the other hand, we see

the demand for the charter traffic to Türkiye depending on the charter operators. Of course, we continue on a seasonal basis. This is mainly for Antalya and İzmir, which we do as charter operators. But Turkey is a growing nation. It's a large country, and of course, we are serving it. We connect Latvia to Türkiye very well. We are a small country connecting to a very large country and it works very well.

### **✈️ Aviation Turkey: How do you see Türkiye's position in your company's future business projection? What are your expectations from Türkiye and Turkish passengers to meet your plans and expectations?**

**Martin Gauss:** We expect Turkish passengers to book us and fly with us. I hope that they like our product, that they like our price structure, and they like the Baltics. So, come to the Baltics. Because we not only bring people

to Istanbul but also carry the people coming to the Baltic states. I think a lot of people don't know the Baltic states and their beautiful nature, and I hope that tourism here will also benefit from it as we have that connectivity. Also, we're talking about cargo, which we carry in our bellies. Whenever an airline flies a route, it normally develops the countries' economies, even if they are small. So, in our business plan. We have that route as a profitable route going long term, and it was a prosperous development for both countries. We see the traffic developing. We saw what happens if airlines don't fly during Covid. I think airlines are there to connect people and countries, and I hope we can continue this in as many places as possible. Looking forward to peace in the countries which we don't connect today so that also there you can connect again. At the end of the day, our industry is to connect people and places,

and that's what we want to do. We're not doing any politics.

### **✈️ Aviation Turkey: Can you elaborate on airBaltic's efforts and projects that focused on safe and sustainable aerospace? How would you summarize airBaltic's ongoing sustainability projects?**

**Martin Gauss:** Of course, by flying one of the youngest fleets in Europe and one of the most modern fleets on emissions, we have taken a big step ahead of many others who still need to change their fleet. But we don't stop there. We increase the usage of sustainable aviation fuel where it is available year by year. The problem is that it is not available, for example, at Riga Airport yet, but we are also looking at diversity in very different ways. We have changed our car fleet, completely technician cars, ground operations, and even management cars; they're all fully electric. So, we no longer have combustion cars. We are trying to do waste management in a different way. We got an award from IATA for diversity and inclusion two years ago, being number one in the world by having a 50% male and female workforce at airBaltic, including the management. So, we are taking lots of steps to promote diversity and sustainability. The long-term future needs to be a new technology. So, our aircraft technology,



plus using SAF fuel, is one step toward zero-emission flying. We will need different technologies for aircraft engines, whether electric, hydrogen, or something else. We don't know today.

As we are always at the forefront of technology in airBaltic, we are also trying to commit to new technologies at a very early stage and engage ourselves in the development of new technologies. We are not necessarily buying them in the experimental phase, but we would definitely want to be there at the very beginning to benefit from any of these developments later, similar to the A220-300 development. As a technology-driven organization, we are very keen on this because our target is clear. The public pressure on airlines to show sustainable behavior is very big, and we want to do our part. Looking at our sustainability efforts, we've made a big step with the fleet, which is the biggest one. We are still using a lot of emissions, of course, as we are an airline, but I think we are leading in this process. If we look at all the things we have done and with that, if you're leading in an area, you can only get better. So, I hope that in the next 10-15 years, we will find the right technology so that aircraft no longer burn fossil fuels. Engine manufacturers have to come up with something that powers aircraft without fossil fuels.



Ayşe Akalın - Editor in Chief of Aviation Turkey Magazine & Martin Gauss - CEO of airBaltic

The 'Green Deal' of the EU, of course, also forces us to use 2% by 2025, but for a couple of years, we have already been using it. So, depending on the destination, you are already forced to do so. For example, if you fly to Oslo in Norway, you have to use SAF. So, airBaltic is increasing its Sustainable Aviation Fuel every year. We also offer passengers an extra €2.99 to compensate and buy SAF, which means we use that money exclusively to buy Sustainable Aviation Fuel as an option. Unfortunately, all these compensation schemes that you offer to passengers don't really work, and that's what all airlines say. Passengers are not clicking on the bottom to say, 'OK, I want to pay extra because I'm going to save the planet.' This is nothing we see yet. Maybe it's changing in the future. But today, when it comes to

booking a ticket, you have the option to click and pay extra for SAF, and even the younger generation, which says, 'OK, this is something we want to have,' doesn't choose it. So, not today, but maybe tomorrow. It's natural; it's in our biology. We are humans, and nobody goes into a shop and says oh, this costs only €7.99, let's pay €10. Therefore, we need to fix it with technology, not by asking somebody to pay extra for a ticket than they would have to pay.

**✈️ Aviation Turkey: Thank you very much. Would you like to add anything in the way of a message for our readers?**

**Martin Gauss:** I believe we have a round interview. I'm very happy, and I hope your readers like it. It was a pleasure talking to you.

• Editor's Note: In a press conference held in Riga on

March 5, 2024 Latvian carrier airBaltic has announced impressive performance figures for 2023, confirming that the Riga-based carrier continues to go from strength to strength. According to disclosed official figures in 2023 airBaltic recorded the highest profit in its 29-year history. The company reported profits of €34 Million (US\$37.4 million) for the year. Additionally, the airline concluded 2023 with the historically highest revenue of €668 Million (\$734.8 Million), which represents an increase of 34% compared to 2022. In 2023, airBaltic performed a total of 65,500 flights (represents 30% increase compared to 2022) and the number of passengers carried by the airline soared by 36% to 4,5 million passengers. The airline forecasts more for 2024 🌍



## THY 2033 Strategy & Fleet Expansion with Historic Airbus Order

As National Flag Carrier of Türkiye, Turkish Airlines (THY), which reached 83.4 million passengers (increased by 16.1% compared to the same period of 2022) in 2023, when it celebrated its 90th anniversary, aims to reach over 170 million passengers in 2033, when it will celebrate its 100th anniversary. The number of aircraft in THY's fleet, which took delivery of its 400th aircraft on February 24, 2023 and carried its 1 billionth passenger in April, reached 440 by the end of December 2023, and this number is targeted to reach 813 aircraft in 2033, when it will celebrate the 100th year of its establishment.

Growing significantly higher than the industry average over the last 20 years while having significant contributions to Türkiye's economy and labor market, Türkiye's National Flag Carrier THY, unveiled its '10-Year Strategic Plan' in April, 2023 and shared its 2033 Strategy document with a title of "From Boutique to the Top" at its official website in November 2023.



by İbrahim Sünnetçi

Determined in line with its vision for 2033, the strategic focus areas of the THY, that aim to generate significant value for its stakeholders, are as follows:



- Achieving consolidated revenue of over 50 Billion USD by 2033,
- Attaining an EBITDAR margin between 20% and 25% during 2023-2033,
- Improving efficiency, maintaining cost discipline and creating new opportunities to generate additional revenues in order to sustain THY's strong financial performance,
- Contributing 140 Billion USD of added value to Türkiye's economy by 2033,
- Expanding THY fleet

to 435 aircraft by 2023 (reached 440 by the end of December 2023) and to over 800 aircraft by 2033; growing the passenger network to 400 destinations from 345 in 2023,

- Doubling the passenger capacity in 2023 by 2033 with an annual average growth rate of 7%,
- Servicing 170 million passengers by 2033 compared to over 85 million in 2023 (achieved 83.4 million passengers by the end of December 2023),
- Reaching 150 thousand employees including the subsidiaries (13x). The number of employees working for the Türk Hava Yolları Anonim Ortaklığı (THY) and its subsidiaries as of December 31, 2023 is 55.884 (December 31, 2022: 40.264). The average number of employees working for the Group for the year ended December 31, 2023 and 2022 were 51.753 and 38.555 respectively,
- Doubling the transported cargo volume and positioning Turkish Cargo among the top three cargo carriers globally by 2033; leveraging the capabilities of its cargo hub, SmartIST, which is one of the largest air cargo terminals in the world,
- Establishing THY's low-cost arm AnadoluJet as a separate subsidiary (AnadoluJet will operate under the 'AJET Air

Transportation Inc.' name as a wholly-owned subsidiary starting from March 2024, the airline's first flight will be on March 31, 2024); repositioning its brand, restructuring its revenue and cost structures, and reaching a fleet size of 200 new generation aircraft to strengthen its competitive positioning,

- Improving customer experience and brand recognition by:

- Providing each passenger a customized service across all service channels

- Completing cabin transformation to enhance in-flight experience

- Growing further Miles & Smiles loyalty program and increasing the number of active members

- Ranking among the top 3 airlines globally in providing the best digital experience by implementing new projects in digital transformation

- To become a sustainable airline by:

- Increasing the number of new generation aircraft in the fleet

- Increasing the consumption of sustainable aviation fuel

- Expanding the number of LEED certified buildings to

boost renewable energy usage

- Becoming a "Carbon Neutral" airline by 2050 through the implementation of carbon emission offsetting projects

With 65 aircraft, Turkish Airlines served 10 million passengers in 2003; Having increased the number of aircraft more than 6 times and the number of passengers more than 8 times in 20 years during 2003-2023, THY had the pleasure of hosting its 1 billionth passenger in April 2023. Turkish Airlines, Türkiye's most valuable brand and largest exporter, has increased its total revenue more than 10 times in 20 years and contributed more than 50 Billion USD to the Turkish economy. On the one hand, it played a major role in the development of tourism, and on the other hand, it introduced made-in Türkiye products to the world with the cargo it carried.

Standing out from its competitors, Turkish Airlines (THY) reached pre-pandemic levels ahead of the industry as of June 2022, and surpassed 2019 capacity level by 25% in October 2023. THY continues growing sustainably in 2023 and achieved a double-digit growth rate on the year of the 90th anniversary of its establishment and 100th anniversary of the Republic of Türkiye.



## ARTICLE

While Turkish Airlines was an airline with ideals of gaining a global airline identity 20 years ago with a fleet of only 65 aircraft, by the end of 2023 it becomes one of the largest fleets in the world with a fleet of 440 aircraft. THY took delivery of its 100th aircraft in 2006, its 200th aircraft in 2012, its 300th aircraft in 2016, and its 400th aircraft on February 24, 2023. It will achieve its next 100 aircraft progress in shorter intervals and will crown its adventure, which started with 5 aircraft, with over 800 aircraft in its 100th year. In 2033, the number of passengers is expected to double compared to 2023 and exceed 170 million. While Turkish Airlines welcomed the 1 billionth passenger in its history on the 90th anniversary of its establishment, it aims to meet its 2 billionth passenger in 2031, just 7 years from now, as an indication of its extensive operations spread around the world.

Türkiye's flag carrier Turkish Airlines increased its net profit, which was 143 Million USD in 2003, by 18 times to 2.725 Billion USD in 2022, reaching the highest profit in its history. It has achieved financially healthy and profitable growth by increasing its balance sheet asset size by 13 times in a 20-year period. In 2023, in addition to the direct income of over 19 Billion



Ahmet Bolat - Turkish Airlines Chairman of the Board and Executive Committee

USD in 2023, THY aimed to create a total of 55.6 Billion USD for Türkiye. Within the framework of the 10-Year Strategic Plan, direct income is targeted to reach 52.2 Billion USD and total contribution is targeted to reach 144 Billion USD in 2033. According to 2033 Strategy document the total contribution of the THY between 2023 and 2033 will be 1.1 Trillion USD, leaving behind the economies of many developing countries.

Despite a challenging operating environment, during the period of January – December 2023, the number of passengers carried by THY soared by 16.1% to 83.4 million passengers compared to 71.8 million passengers in the same period of 2022. Additionally, during the same period number of international to international passengers carried increased by 27.1% to 29.8 million from 23.4 million in the same period

of 2022. According to the THY's January-December 2023 Traffic Results, the airline's total load factor increased by 1.9 points to 82.6% compared to the same period of 2022. International load factor was 82.4% while domestic load factor was 84.3%. THY reported a 1.2 point decrease in air cargo/mail during the period of January – December 2023, to 1.66 million tons from 1.68 million tons in the same period of 2022. Meanwhile, according to reports global air cargo tonnages for the full year of 2023 were 5% lower than in 2022. In terms of fleet size, THY concluded 2023 with 440 aircraft including the cargo aircraft. During December 2023 Turkish Airlines continues its growth in Japan by adding Osaka International Airport in Osaka, the second largest city in Japan after Tokyo, to its flight network on December 12. According to THY Chairman of the Board and Executive

Committee Ahmet Bolat, in 2022, THY brought 14.8 Billion USD to Türkiye, 5.9% of this remained in Türkiye. Last year's figure was 16.2 Billion USD, of which 8 Billion USD remained in Türkiye. Bolat also declared that THY announced a net profit of 93.5 Billion TL in the 4th quarter of 2023. THY's net profit for 2023 was 163 Billion TL. THY's 2023 Q4 profit increased by 82.2% compared to the previous quarter. As of March 17, 2024 THY 2023 Annual Report has not been publicized, so we could not be able to make comprehensive evaluation on THY's annual performance in 2023.

Flies to more countries globally than any other airline THY's fleet size (440 aircraft as of December 31, 2023) and fleet age (9.2 years) ranking is among the top 10 largest carriers in terms of fleet size (global ranking 9th) and fleet average age (global ranking 4th).

## Historic Deal for Airbus to Provide up to 355 Aircraft for Turkish Airlines

Aiming to increase its passenger numbers by 74% to over 170 million and to grow its fleet to over 800 aircraft in the next decade, Turkish Airlines, will procure some 600 aircraft including 400 narrow-body and 200 wide-body from both Airbus and Boeing, in the next decade to achieve 2033 Strategy and to compensate for retirements on the way. For narrow-body requirement in December 2023, THY ordered 250 A321neo (150 firm + 100 optional) and a total of 105 A350 (60 A350-900 + 20 optional, 15 A350-100, 5 A350F + 5 optional) wide-body aircraft from Airbus. Both aircraft types incorporate advanced technologies, achieving remarkable improvements in fuel burn, operating costs, CO2 emissions, and noise reduction, underscoring Turkish Airlines' commitment to sustainability and passenger comfort. THY also carry out discussions with the Boeing for the procurement of a high number of B737 MAX narrow-body and B787 Dreamliner wide-body airliners. It is also said that the aforementioned



600 aircraft order will also cover some 25 to 30 B77X aircraft. As of March 18, 2024 the Boeing part of the fleet investment is still under negotiation.

In line with 2033 Strategy to expand its fleet size to 813 aircraft by 2033, Turkish Airlines announced a monumental expansion of its fleet with the acquisition of up to 355 state-of-the-art Airbus aircraft on December 15, 2023. According to THY announcement within the scope of this historic order the airline had made firm orders for 230 jets and placed purchasing rights for an additional 125 aircraft. In the statement issued by the Turkish Airlines' Press Office on December 15, it was underlined that the firm order for 60 A350-900 aircraft also included 10 A350-900s that Turkish Airlines had ordered in September 1, 2023 and thus covered only 50 new aircraft. The

airline's confirmed order purchase, which includes 150 Airbus' best-selling A321neo and 70 of the world's most modern and efficient A350 widebody aircraft (50 A350-900s, 15 A350-1000s and 5 A350F freighters), has a catalogue price of more than 40 Billion USD. This follows two orders from the THY for 4 A350-900s in July 2023 and 10 A350-900s in September 2023. This latest order will take Turkish Airlines' total orderbook for Airbus aircraft to 504, of which some 220 are already delivered.

The engines (Trent XWB) for the A350 Family will be provided by Rolls-Royce. Turkish Airlines, the national flag carrier of Türkiye, said the deal also includes a separate order for Rolls-Royce to provide maintenance services and spare parts for the A350 jets' engines. The Trent XWB engines, which are assembled and tested

in Derby, UK will deliver 25% lower CO2 emissions compared to previous generation aircraft. On December 15, 2023 Rolls-Royce announced that Turkish Airlines would order 100 Trent XWB-84 engines for the A350-900s and 40 Rolls-Royce Trent XWB-97 engines for the A350-1000s and A350F freighters ordered from Airbus and to be delivered between 2025 and 2033. Turkish Airlines (THY) selected Rolls-Royce's Trent 700 engines to power A330 aircraft for the first time in 2009, and since then the long-term partnership between THY and Rolls-Royce has continued to grow and develop. THY also ordered Airbus A350 aircraft powered with Trent XWB Engines which entered into service starting from 2020. As of December 2023, THY already operates 40 Rolls-Royce Trent XWB-84 engines on the A350-900s and 26 Trent 700



engines on the A330s. In April 2018 THY selected GEnx-13 Engines for its B787 Dreamliner (25+5) aircraft but for its new B787 Dreamliner aircraft THY is also evaluating other candidates including the Trent 1000 of Rolls-Royce, which has been designed and optimized specifically to power the Boeing 787 Dreamliner Family of aircraft.

This strategic acquisition underscores Turkish Airlines' commitment to enhancing its operational efficiency, environmental stewardship, and passenger comfort. In line with this significant fleet expansion, Turkish Airlines, the national flag carrier of Türkiye, plans to continue to reinforce its status as an airline with one of the world's most comprehensive flight networks. The addition

of these Airbus aircraft will further enhance the airline's ability to connect Türkiye to the farthest corners of the globe, offering its passengers even more destinations and travel options while maintaining the highest standards of service and connectivity that Turkish Airlines is renowned for.

On the new order, Turkish Airlines Chairman of the Board and the Executive Committee, Prof. Dr. Ahmet Bolat stated: "This landmark order is more than an expansion; It's a testament to our dedication to innovation, operational excellence, and a sustainable future. The addition of these advanced Airbus aircraft to our fleet will not only enhance our operational capabilities but also significantly contribute to our environmental

goals. This investment is a crucial milestone in the further evolution of Türkiye's aviation industry. By modernizing our fleet with more efficient and environmentally friendly aircraft, we are reinforcing our leading position in global aviation and contributing to the nation's prominence as an aviation hub.

Furthermore, this expansion will also have a considerable positive impact on Türkiye's tourism sector. Enhanced flight operations and increased connectivity, thanks to these state-of-the-art aircraft, will attract more international tourists, boosting the tourism economy. This will not only showcase Türkiye's rich cultural heritage and natural beauty to a wider audience but also support the overall

growth of the country. With our home base in Istanbul, which straddles continents, we continue our mission of bridging people from all over the world. These new aircraft are not just a step forward for Turkish Airlines but represent a leap forward for the broader aviation and tourism industries in Türkiye, guiding us towards an even brighter future."

"This order for the latest generation aircraft is a demonstration of the bold vision by Turkish Airlines. The A350-900, A350-1000, A350F and A321 will all be flagship aircraft in their respective category and efficiency drivers to shape the airline's future and sustainable expansion, with more range, less fuel, noise and emissions and best cabin in class. The opening into the A350-1000 and the A350F



highlights the cross-model value of the A350 Family and reinforces our long-lasting partnership with Turkish Airlines and Türkiye's aviation sector overall and we are proud to accompany Türkiye's connection to the world with our state-of-the-art aircraft," commented Christian Scherer, Airbus Chief Commercial Officer and Head of International.

A significant portion of the manufacturing process for the THY's new aircraft is expected to take place in the UK. All the wings will be designed in Filton, Bristol, and assembled in North Wales, supporting hundreds of manufacturing jobs in the UK aerospace supply chain. Thus, UK Prime Minister Rishi Sunak and Business and Trade Secretary Kemi Badenoch have welcomed the historic deal for Airbus to provide 220 aircraft for Turkish Airlines, which will be worth billions of pounds to the UK and will support thousands of high-skilled jobs across the UK. The British Government said December 15, 2023 deal includes 70 aircraft powered by Rolls-Royce. "This landmark deal between Turkish Airlines, Airbus and Rolls-Royce demonstrates that the sky's the limit for the UK's thriving aerospace sector," British Prime Minister Rishi Sunak said in a statement issued on



the same day. Business and Trade Secretary Kemi Badenoch said, "This is a big win for the UK's world-leading aerospace sector and one that will help secure high-skilled jobs across the country and drive economic growth."

On the THY's new order, Rolls-Royce CEO Tufan Erginbilgic said: "Today's announcement marks an exciting and truly historic day for Rolls-Royce. It is proof that the actions we are taking to transform Rolls-Royce into a high performing and competitive company underpinned by profitable growth are working. The Trent XWB is the perfect engine platform to support Turkish Airlines as it continues to grow. This order will make Turkish Airlines the largest Trent XWB operator in the world, and I would like to thank them for putting their trust in Rolls-Royce..."

The A321neo is the

largest aircraft in Airbus' A320neo Family, offering unparalleled range and performance. By incorporating new generation engines and Sharklets, the A321neo brings a 50% noise reduction and more than 20% fuel savings and CO<sub>2</sub> reduction compared to previous generation single-aisle aircraft. Having the widest single-aisle cabin in the sky, the aircraft is the perfect contender for maximizing comfort.

The A350 is the world's most modern and efficient widebody aircraft and the long-range leader in the 300-410 seater category, flying efficiently on any sector from short-haul to ultra-long-haul routes up to 9,700nm. Its clean sheet design includes state-of-the-art technologies, aerodynamics, lightweight materials and latest generation engines that together deliver 25% advantage in fuel burn,

operating costs and CO<sub>2</sub> emissions, as well as 50% noise reduction compared to previous generation competitor aircraft. This makes the aircraft a good neighbor and global citizen wherever it flies. The A350 Family has two versions: the A350-900, and the longer fuselage A350-1000, both offering an ultimate passenger experience even on the longest of flights. Its innovative design delivers a true feeling of spaciousness, with wide seats, high ceilings and alluring ambient lighting.

The A350F features the largest main deck cargo door and a fuselage length optimized for cargo operations. Over 70% of the airframe is made of advanced materials, which together with efficient Rolls-Royce engines generate an advantage of at least 20% lower fuel burn and CO<sub>2</sub> emission over its current closest competitor.



## THY Hosts UK Business and Trade Secretary Kemi BADENOCH in a Pivotal Meeting and Aircraft Showcase

On January 5, 2024 Turkish Airlines, the national flag carrier of Türkiye, welcomed the Business and Trade Secretary for the United Kingdom Kemi Badenoch, along with Airbus Türkiye President Simon Ward and Rolls-

Royce's President for the Middle East, Türkiye and Africa (META) John Kelly for a momentous meeting and tour of one of its Airbus A350 aircraft. This event marks a key milestone in enhancing aviation relations between Türkiye and the United Kingdom.

Turkish Airlines Chairman of the Board and Executive Committee Prof. Dr. Ahmet Bolat remarked, "We are happy to welcome Secretary Badenoch today and continue to take another step in

Turkish Airlines' journey of international collaboration and innovation. Our discussions have set the stage for strengthened ties and enriched cooperation of our respective countries' aviation sectors, aligning with our vision for a progressive and sustainable global aviation industry. With our sizable new order of Airbus aircraft and Rolls Royce engines, we plan to continue to maintain our leading position in global aviation in the years to come."

Business and Trade Secretary for the UK Kemi Badenoch said; "I'm delighted to be here following the historic deal with Turkish Airlines and UK-based Airbus and Rolls Royce - a deal that highlights our thriving trade relationship with Türkiye. Türkiye presents huge opportunities for the UK's world leading aerospace and manufacturing sectors, and I am using visits like this to unlock further opportunities for business on both sides."

Airbus Türkiye President Simon Ward said: "These meetings between the UK and Türkiye are a testament to increasing cooperation and partnership between the two countries, improving competitiveness and providing opportunities for businesses across many sectors. This was only recently cemented by a historic order from Turkish Airlines for 220 firm Airbus aircraft. We are proud to say that every commercial Airbus aircraft has Turkish parts and this order only reinforces our long-lasting partnership with Turkish Airlines and Türkiye's aviation sector. Today visiting Turkish Airlines facilities at IGA Airport, we once more witness the ambitious and successful growth of Türkiye and its flagship brand Turkish Airlines."



Honeywell's business is aligned with three powerful megatrends – automation, the future of aviation and energy transition – underpinned by our Honeywell Accelerator operating system and Honeywell Connected Enterprise integrated software platform.



Products and services from Honeywell Aerospace Technologies are found on virtually every commercial aircraft. We build aircraft engines, cockpit and cabin electronics, wireless connectivity systems, mechanical components. Our hardware and software solutions help create more fuel-efficient aircraft, more direct and on-time flights and safer skies.

## SAFER, MORE FUEL-EFFICIENT FLYING AND INNOVATIONS FOR THE FUTURE OF AVIATION

### BUSINESS PORTFOLIO

- Electronic Solutions
- Engines and Power Systems
- Advanced Electromechanical Solutions
- Services and Connectivity
- Unmanned Aerial Systems / Urban Air Mobility

### TECHNOLOGIES

- Air and Thermal Management
- Aircraft Connectivity Systems and Integrated Services
- Autonomous Flight, Detect-and-Avoid Systems
- Federal Solutions Management and Operation
- Hybrid-Electric Systems
- Integrated Avionics and Flight Management Systems
- Life Support Systems and Air Travel Hygiene
- Flight Efficiency and Maintenance Optimization
- Manned/Unmanned and Satellite Applications/Space
- Electromechanical Solutions
- Navigation, Safety, and Surveillance Solutions
- Propulsion and Power Systems
- Runway and Flight Safety Technology
- Wheels and Braking Systems
- Aerospace Sustainability Solutions



## ARTICLE

Rolls-Royce's President for the META John Kelly, said, "It has been a privilege to contribute to this remarkable event, fostering cooperation and strengthening the UK-Türkiye relationship. We are delighted that Turkish Airlines has recently placed an order for firm 100 Trent XWB-84 and 40 Trent XWB-97 engines, which underscores Rolls-Royce's commitment to profitable growth and aligns seamlessly with the airline's pursuit of excellence in the aviation industry. Together we are committed to pushing the boundaries of aviation technology and ensuring a sustainable and innovative future for both organisations."

This meeting follows Turkish Airlines' announcement on December 15, 2023, of one of the biggest Airbus aircraft orders to date. Flag carrier also chose Rolls Royce as the engine maintenance servicer of a sizable amount of the new Airbus widebody orders to compliment several aircraft of its existing fleet which already uses UK company's engines. This expansion reflects Turkish Airlines' commitment to enhancing its fleet with modern, efficient aircraft, strengthening its status as a leading airline globally.

Secretary Badenoch's visit concluded with a tour of a Turkish Airlines A350



aircraft, highlighting the advanced technology and comfort offered by the airline's contemporary fleet. This engagement not only reinforces the strong partnership between Türkiye and the UK but also lays the groundwork for future collaborative efforts in the countries' aviation industry.

### Turkish Airlines January-February 2024 Traffic Results

THY has announced its January and February 2024 traffic results on February 9, and March 7, respectively. According to traffic results THY reached a figure of 6.3 million passengers in January, up from 6.1 million (represent 2.7 increase) in January 2023, and welcomed 6.1 million guests onboard in February, an increase of 25.4% compared to 4.9 million passengers in February 2023. According to a statement issued by

the airline's Press Office, the passenger load factor was 80.3% during January (represents 0.4 point decrease compared to same period of 2023) and 81.3% (unchanged compared to same period of 2023) in February 2024, while the passenger load factor for international flights was 80.9% in February and 79.8% in January. Meanwhile, during the period of January – February 2024, total number of passengers carried increased by 12.8% to 12.3 million, compared to 10.9 million passengers in the same period of 2023 and the number of international to international guests welcomed onboard increased by 14.4% to 5 million from 4.4 million in the same period of 2023. According to traffic results during the period of January – February 2024, available seat kilometers (ASK) increased by 14.7% to 38.4 Billion from 33.5 Billion for the same period

of 2023. During the period of January – February 2024 cargo-mail volume of the airline increased by 34.5% to 297.2 thousand tons from 221 thousand tons in the same period of 2023. The number of aircraft in THY fleet reached 450 by the end of February 2024.

### Turkish Airlines Starts Australia-Melbourne Flights, Expanding its Operations to 6 Continents

Flying to more international destinations than any airline in the world THY, as of January 2024, was flying to 129 countries worldwide, with 345 destinations, including Türkiye, across 5 continents. Turkish Airlines (THY) connects its passengers to the 6th continent with the start of flights to Australia. Starting from



# EXPERIENCE THE AIRPORT OF TOMORROW, TODAY

**We have served over 1.3 billion passengers to date across our portfolio of 15 airports in eight countries.**

The world around us is in constant evolution, and we are leading the change through our expertise. Focusing on innovation, sustainability, and passenger experience, we are imagining the airport of tomorrow, today.

[tavairports.com](https://tavairports.com)



[f](#) [@](#) [x](#) [in](#) [v](#) /tavairports

**TAV**  
Airports



a member of  
**Groupe ADP**





March 1, 2024 the flag carrier has incorporated Melbourne, Australia, its 346th destination in 130 countries, into its ever-expanding flight network served with its modern fleet which reached an impressive number of 452 aircraft (includes 24 cargo aircraft) as of March 15, 2024. With the Melbourne flights relayed via Singapore, THY becomes the only European airline to currently operate flights to Melbourne Airport. Turkish Airlines schedule 3 flights a week to Melbourne, the capital of Victoria State. By flying thousands of passengers on the İstanbul-Melbourne route annually, the airline will contribute to trade and tourism volumes of both countries.

Commenting on the inaugural flight to Melbourne that took place on March 1, 2024, Turkish Airlines Chairman of the Board and the Executive Committee, Prof. Dr. Ahmet Bolat stated: "Today marks a monumental milestone

for Turkish Airlines, as we celebrate the realization of a long-held ambition to extend our reach to the Australian continent. This achievement follows meticulous planning and extensive infrastructure developments, symbolizing the successful bridging of İstanbul with a new and vibrant continent. The inauguration of our Melbourne route is a testament to our growing influence in the Asia-Pacific region and underscores our unwavering commitment to fostering connections between diverse cultures and communities across the globe. Australia, with its breathtaking landscapes and warm-hearted people, now becomes the 130th country to join our expansive network, signifying our presence across six continents. Through our unparalleled network, we are thrilled to offer our guests a gateway to global exploration, ensuring that our legacy of exceptional service quality continues to flourish in

every corner of the world."

Minister for Jobs and Industry Natalie Hutchins stated: "Victoria is home to Australia's largest Türkiye-born community, a big nod to our vibrant multicultural state. We look forward to creating easier connections for this community and boosting tourism with the arrival of Turkish Airlines."

Melbourne Airport CEO Lorie Argus said the airline's entry into the Australian market provides new options for travellers and local exporters: "Turkish Airlines has an extensive network and flies to more countries than any other airline so this new competitor in the Australian market is fantastic news for consumers. We've worked closely with the Victorian State Government to bring Turkish Airlines to Melbourne, and we now look forward to see them growing their services over the coming years. Increased competition helps put downward pressure on prices, which

will ensure Victorian residents and businesses can stay connected with family, friends and clients around the world. Melbourne is proudly home to the largest Turkish population in Australia, so we expect these flights will prove particularly popular with people looking to visit friends and relatives."

### **AJET, New Low-Cost Subsidiary of THY, to Commence Flights on March 31, 2024**

Established in 2008 as a successful brand of Turkish Airlines (THY), and reunited over 150 million guests with their loved ones in 16 years, AnadoluJet will conduct its operations under the name "AJET Air Transportation Inc." as a wholly-owned subsidiary of Turkish Airlines (THY), starting from the end of March 2024. Established as a low-cost airline of global standards and to strengthen its competitive position in the market,



AJet will continue its operations based from Istanbul Sabiha Gökçen and Ankara Esenboğa Airports.

In preparation for the summer travel season, the airline plans to operate a fleet of 103 aircraft to 93 destinations (covering 52 international and 41 domestic routes) in 33 countries. AJet airline will continue to operate short and medium-haul routes driven by leisure demand. According to AJet's fleet expansion plan, by 2033 the airline will fly to 44 countries, covering 42 domestic and 80 international routes with our 200 aircraft.

THY Chairman of the Board and the Executive Committee, Prof. Dr. Ahmet Bolat commented on the establishment of AJet: "In line with our goals for the next 10 years, we are proud to have started the establishment process of our AJet. The efforts and dedication we have put in for a long time have paid off, and we will introduce AJet to the skies with the summer schedule at the end of March 2024. We fully believe that AJet, with its new name, will become an important part of the low-cost aviation industry on global scale."

Following its formal establishment on July 14, 2023 and completion of its registration process at the Istanbul Trade Registry Office on August 7, 2023,

AJet, Turkish Airlines' new low-cost subsidiary, made its first application on August 28, 2023 to obtain an Air Operator Certificate (AOC) within the framework of the Regulation on Commercial Air Transport Enterprises. All application processes was completed and AJet was granted an Air Operator Certificate by the General Directorate of Civil Aviation (SHGM) on January 2, 2024. The operating license delivery ceremony to AJet was held at the Ministry of Transport and Infrastructure on January 2, with the participation of Minister of Transport and Infrastructure Abdulkadir Uraloğlu.

Spoke at AOC delivery ceremony Minister Uraloğlu made the following evaluations: "We followed the necessary investigations with our General Directorate of Civil Aviation and as of today, we are issuing AJet's operating license. At the end of last year, we opened the second runway of Sabiha Gökçen Airport. We closed the year with aviation. We are opening the first shift of the new year with aviation. THY is in the red and AJet is in the red. It has a blue logo indicating aviation. The seat design is truly ergonomic. It will offer comfortable travel to passengers. We have 14 companies operating in

aviation. 11 of them carry cargo and passengers, and 3 of them carry cargo. Like THY, Anadolu Jet is also in our nearby geography. "We have no hesitation about it becoming a brand. We will receive the next export figures separately as THY and AJet."

THY Chairman of the Board and Executive Committee Ahmet Bolat pointed out that AnadoluJet will serve as AJet with 103 aircraft this year and will fly to 52 international and 41 domestic destinations, and added, "It will bring 16 million international passengers from abroad. We aim to carry 8 million on domestic lines. We plan to respond to the demand on domestic lines by adding 15% more capacity in 2024. The configurations of our aircraft are changing. We made an agreement for 355 Airbus. From here, we expect to launch our AJet as soon as possible. We will replace it with new generation aircraft. We will offer services with more standardized cabin configuration both inside and outside. Our seats are much more comfortable than those on the market. They are also quite comfortable in terms of legroom. In 2022, THY brought 14.8 Billion USD to Türkiye, 5.9% of this remained in Türkiye. Last year's figure was 16.2 Billion USD, of which

8 Billion USD remained in Türkiye. AJet will be the export gate from Sabiha Gökçen to Turkey."

After getting its operating license on January 2, 2024 AJet airline has started its ticket sales under the name 'AJet' on its official website ajet.com as of March 12, 2024. Now under its new name and scope, AJET is aiming to above clouds on March 31 to offer more modern, comfortable, and accessible experience for its guests while planning to be a prominent low-cost airline of a global scale and further strengthen its competitive position in the market.

## Conclusion

Founded in 1933, and employs around 85.000 staff with its 13 subsidiaries and Joint Ventures (includes 3 airways; SunExpress, Air Albania and AJet), Turkish Airlines (THY) continues to proudly fly our national flag among aviation giants as a brand that steers the industry through its unique wide flight network, modern fleet and successful crisis management. In the upcoming period, in order to continue growing Turkish Industry's sustainably in line with the development targets of Türkiye, THY's goal, as the national flag carrier, is to carry Türkiye further to new success stories 🌍



## "Turkish Airlines as the Largest Operator of Rolls-Royce's Trent XWB Engines Worldwide"

An exclusive interview with Gorkem Kiris - Country Director at Rolls-Royce & Scott Holland - VP Marketing - Regional Marketing at Rolls-Royce

**Aviation Turkey:** First of all, thank you for sparing time for our readers. Can we start our interview by taking a brief analysis of 2023 from Rolls-Royce Civil Aerospace's point of view? Could you provide a capsule summary of your major activities carried out during 2023 and elaborate on your targets for 2024?

**Gorkem Kiris:** 2023 was a golden year for Rolls-Royce for sales and it was the most active year we have ever seen outside of a new aircraft launch. Recent significant wins in 2023 include Turkish Airlines and Delta Air Lines.

I am particularly delighted that our order from Turkish Airlines is part of this story, selecting 70 x Airbus A350 aircraft that are powered exclusively by our Trent XWB-84 and Trent XWB-97 engines. This has a particular significance to us at Rolls-Royce as it will make Turkish Airlines the world's largest operator of the Trent XWB, when this selection is added to the 40 x Airbus A350s it already has in service or on order. This agreement therefore represents a significant milestone in our journey.

We also saw some significant selections of

the Trent XWB-84 and Trent XWB-97 from Air India, EVA and Cathay Airlines last year. Overall, our large engine flying hours continued to recover in 2023 - our latest financial results confirmed they are now 88% of 2019 levels, compared with 65% in 2022.

Looking ahead to 2024 and beyond, our focus will be on making sure that, as an industry, we can deliver in terms of new deliveries and Maintenance, Repair & Overhaul (MRO) so that our customers can capitalise on the growth in demand we expect to continue from 2023.

**Aviation Turkey:** Turkish Airlines selected your Trent 700 engines to power A330 aircraft for the first time in 2009, and since then your long-term partnership with Turkish Airlines has continue to grow and develop. Can you elaborate on the current status of your cooperation with both Turkish Airlines and other Turkish airline operators? How many orders have you secured so far for the Rolls-Royce engines from Turkish airline operators and how many of them have been delivered so far to end users?

**Gorkem Kiris:** Türkiye has been identified as a strategically significant market in which we are cultivating strong, long-term partnerships. Hence, we are committed to doing our best to support Turkish Airlines and other Turkish operators to reach their full potential.

As you stated, our journey with Turkish Airlines started back in 2009 when they first selected our Trent 700 engines to power their Airbus A330 aircraft. Our esteemed partnership based on trust and mutual benefit has consistently progressed since that time with the subsequent orders of Airbus A350 aircraft equipped with Trent XWB engines. Today, we have roughly 55% market share of Turkish Airlines' s wide-body fleet including in service and on order. Turkish Airlines is currently operating Rolls-Royce Trent 700 powered 27 x Airbus A330s and Rolls-Royce Trent XWB powered 16 x Airbus A350s (94 x Airbus A350s is on order). Additionally, Rolls-Royce Trent 700 powered 1 x Airbus A330, Rolls-Royce Trent 500 powered 1 x Airbus A340 and BR710 and Tay powered Gulfstream G450 & G550 Business Jets are being used for VIP operations. The strength of our fleet at Turkish Airlines highlights the reliability and performance of our engines and demonstrates Turkish Airlines's confidence in our

product & technology.

We also established strong ties with other Turkish operators and secured several orders for Rolls-Royce engines from them, contributing to the growth and modernization of their fleets. Today, MNG Airlines operates a fleet of Rolls-Royce Trent 700 powered Airbus A330s for their cargo operations.

Our long-standing partnership with both Turkish Airlines, MNG Airlines and other Turkish operators demonstrate our commitment to delivering outstanding engine technology and comprehensive support services. We are excited to further enhance these partnerships and continue to drive innovation in the aviation industry with our new generation Trent engines. We hope to continue our partnership with the airline customers in the region by providing our new technologies and services.

**✈️ Aviation Turkey:** On December 15, 2023, Rolls-Royce announced that Turkish Airlines ordered 50 x A350-900s and 20 x A350-1000s & A350F Cargo aircraft to be delivered between 2025 and 2033. Have you so far secured a formal contract for these engines? What can you tell us about the importance of this order for both Rolls-Royce and Türkiye?

**Gorkem Kiris:** As I outlined above, Turkish Airlines ordered 70 x Airbus A350 aircraft (100 x Trent XWB-84 engines and 40 x Rolls-Royce Trent XWB-97 engines) from Airbus in December 2023 and we, as Rolls-Royce, are targeting to sign Total Care Service contract with Turkish Airlines shortly.

In terms of the importance of this order, it represents a historic milestone for Rolls-Royce and Turkish Airlines as it has positioned Turkish Airlines as the largest operator of Rolls-Royce's Trent XWB engines worldwide. It further demonstrates Turkish Airlines's determination to continue to improve its operational capabilities but also its commitment to reaching its sustainability goals. Our Trent XWB is the most efficient large engine in service today and that fuel burn reduction also results in reduced emissions. We are grateful for Turkish Airlines' s commitment and trust placed in Rolls-Royce.

**✈️ Aviation Turkey:** You have faced some criticism of Trent XWB-97 durability and time on wing by particular operators. Can you elaborate on the Trent XWB-97's durability and time-on-wing performance? What can you tell us about Rolls-Royce efforts focusing on major improvements to the Trent XWB-97 engine?

**Scott Holland:** We are investing around £1bn on technology improvements to our Trent 1000, Trent 7000 and Trent XWB-84 and Trent XWB-97 engines to improve availability, reliability and efficiency.

If we turn to the Trent XWB-97, the engine already provides all the thrust required to power the A350-1000. In terms of durability and time-on-wing, we have a staged programme of technology insertions that take us to 2028, and by then, in the harshest of conditions, we are going to double time on wing. In benign conditions which will apply to Turkish Airlines, this will improve time-on-wing by 50%, and this will address airline requirements for greater durability.

**✈️ Aviation Turkey:** Along with turbofan engines, Rolls-Royce also provides Total Care services to Turkish Airlines. Can you elaborate on your Total Care service agreement which enables proactive management of engine servicing? What can you tell us about the status of your negotiations with Turkish Airlines for the engine maintenance services and spare engines for the wide-body A350 aircraft?

**Gorkem Kiris:** Our Total Care service is designed to provide operational certainty for customers by transferring time on wing and maintenance cost risk back to Rolls-Royce. This



## INTERVIEW

industry-leading premium service offering is supported by data delivered through the Rolls-Royce advanced engine health monitoring system, which helps providing customers with increased operational availability, reliability and efficiency. Our existing Trent engines at Turkish Airlines fleet are already covered by Total Care services. The new Trent XWB engines that will power Turkish Airlines's 70 x Airbus A350 aircraft will be supported by this comprehensive service once the contract is signed.

**✈️ Aviation Turkey:** In April 2018, Turkish Airlines selected GEnx-13 Engines for its B787 Dreamliner (25+5) aircraft but for its new B787 Dreamliner aircraft THY is also evaluating other candidates including the Trent 1000 of Rolls-Royce, which has been designed and optimized specifically to power the Boeing 787 Dreamliner family of aircraft. Can you briefly introduce Trent 1000 turbofan engine to our readers? Where do you see the strong points Trent 1000 Engine and how does it differ from its competitors?

**Scott Holland:** Capitalising on the three-shaft architecture of the Trent engine family and incorporating the latest in materials, component and subsystem design and technology, the Trent

1000 was specifically designed and optimised to power the more-electric 787 Dreamliner. It has the highest bypass ratio of any engine in the Trent family and is recognised for being one of the quietest widebody engines in service today. The Trent 1000 powered Boeing 787 Dreamliner is 20% more efficient than the Boeing 767 aircraft it replaces, and the three-shaft architecture of the Trent 1000 complements other key component designs to deliver exceptional fuel burn performance retention in service.

Since entry into service in 2011, we have been continuously improving both the fuel efficiency and the capability of the Trent 1000, our latest Durability Enhancement package for the Trent 1000 TEN will more than double engine time on wing. Phase 1 of our Durability Enhancement package for the Trent 1000 TEN has achieved engine certification by EASA and we are working with Boeing and the FAA to achieve aircraft certification towards the end of 2024. A second package of hot-section enhancements will deliver a further improvement in time on wing of up to 30% and available from 2026.

We are confident that with these product improvements, combined with our industry leading



Total Care service package, we are able to deliver a compelling value proposition for Turkish Airlines.

**✈️ Aviation Turkey:** How is Rolls-Royce addressing the future of commercial aviation? What innovative technology areas will Rolls-Royce focus on in the near term?

**Scott Holland:** In the near term, there are two technology areas where we have made great strides, in terms of developing engine

technology and the use of 100% Sustainable Aviation Fuel (SAF). At the end of last year, we announced that we had successfully run our UltraFan® technology demonstrator to maximum power at our facility in Derby, United Kingdom.

This achievement reinforces our confidence in the suite of technologies that have been developed as part of the UltraFan programme. Confirming this capability is a big



step towards improving the efficiency of current and future aero-engines as UltraFan delivers a 10% efficiency improvement over our Trent XWB, which is already the world's most efficient large aero-engine in service. In total, that's a 25% efficiency gain since the launch of the first Trent engine.

UltraFan's scalable technology, from ~25,000-110,000lb thrust, also offers the potential to power the new narrowbody

and widebody aircraft anticipated in or beyond the 2030s.

As part of the UltraFan development programme, we have identified a number of technologies that are potentially transferable to our current Trent engines, which will provide our customers with even greater availability, reliability and efficiency.

**✈️ Aviation Turkey: Nowadays aviation industry invests in a future with zero carbon**

**projects. Can you inform our readers about Rolls Royce's ongoing zero carbon projects?**

**Scott Holland:** At Rolls-Royce, our aim is to establish a sustainable business model by achieving net zero carbon emissions in our operations by 2030. The major aspects of our efforts towards net zero of our products focuses on SAF and UltraFan® technology. Therefore, our strategy for achieving net zero in aviation involves enhancing engine efficiency, promoting SAF utilization and pioneering innovative propulsion technologies.

The initial stage of the UltraFan test was conducted using 100% SAF. Last year, we had successfully completed compatibility testing of 100% SAF on all of our in-production civil aero engine types. A ground test on a BR710 business jet engine in Canada completed the test regime. Other engines tested as part of the programme were: Trent 700, Trent 800, Trent 900, Trent 1000, Trent XWB-84, Trent XWB-97, Trent 7000, BR725, Pearl 700, Pearl 15 and Pearl 10X. Testing has involved a variety of ground and flight tests to replicate in-service conditions. All tests confirmed the use of 100% SAF does not affect engine performance. The development of highly efficient engines and the increased use of SAF are critical elements of the

aviation industry's journey to net zero.

**✈️ Aviation Turkey: Can you elaborate on Rolls-Royce's efforts and projects that focused on safe and sustainable aerospace? How would you summarize Rolls-Royce's ongoing sustainability projects with global partners? Do you believe that biofuels/SAF will have an important role to play in aviation?**

**Gorkem Kiris:** We do believe SAF will have an important role to play in aviation and we also understand this cannot be achieved by one organization alone. Biofuels and SAF offer the potential for substantial reductions in greenhouse gas emissions. Incorporating biofuels and SAF into aviation operations can help mitigate climate change by lowering CO2 emissions.

SAF is regarded as a promising solution in the aviation industry's pursuit of greater sustainability. As technology progresses and production methods become more efficient, these fuels are becoming more economically viable and scalable, making them increasingly appealing for widespread adoption in the aviation sector. Our testing of 100% SAF on our in-production engines, as outlined above, has been the result of great teamwork with fuel producers, airframers and academics.



We hope the success of these tests provides a level of technical validation that supports those who seek to invest in the production of 100% SAF going forward.

**✈️ Aviation Turkey:** Within the scope of Istanbul Airshow on October 7, 2022 the SAF Declaration Signing Ceremony was held with the participation of Turkish Airlines, Rolls-Royce and Airbus. By signing the Global SAF Declaration with Rolls-Royce and Airbus, Turkish Airlines pledged to increase its usage of SAF to the highest. Can you elaborate on the goals of SAF Declaration and importance of Turkish Airlines's joining Rolls-Royce, Airbus and Safran in the Global SAF Declaration as one of the co-signatories? What kind of cooperation will be established among the companies under this signature?

**Gorkem Kiris:** The Global SAF Declaration is a commitment aimed at advancing the development, production and utilization of SAF. This declaration signifies a collaborative effort among stakeholders in the aviation, aerospace, and fuel industries to reduce carbon emissions. It is open to all airlines, aviation, and aerospace organizations and serves as a supplementary pledge to their existing sustainability initiatives.

As you mentioned, THY became the newest member of the signatories in 2022, marking a significant milestone. Participation in the Global SAF Declaration underscores Turkish Airlines's dedication to environmentally friendly alternatives within its operations and emission reduction efforts.

The collaboration among Turkish Airlines, Rolls-

Royce, Airbus and Safran under this declaration encompasses efforts across the aviation value chain. This includes adapting aircraft and engines for SAF blends, investing in SAF production, maximizing SAF usage in airline networks, adjusting airport infrastructure and researching advanced emission reduction technologies. The declaration emphasizes the importance of setting clear and achievable objectives within each organization to expedite SAF adoption. Collaboration with industry bodies, initiatives and governmental programs is crucial to facilitating widespread and prompt SAF adoption, ensuring the long-term sustainability of the aviation sector.

**✈️ Aviation Turkey:** Would you like to add anything in the way of a message for our readers?

**Gorkem Kiris:** Turkish Airlines has been on an extraordinary growth journey, continuing to connect people from all over the world – evolving from a passenger base of 10 million in 2002 to more than 82 million last year. We are very impressed with Turkish Airlines's remarkable global market penetration and fully committed to support its future wide-body acquisition with our new generation Trent engines.

Personally, the continuous growth of our esteemed relationship with Turkish Airlines makes me very proud and I know everyone in our team will be excited to support the new A350s operations as our engines are delivered.

We continue to seek to be a high-performing, competitive, resilient and growing company that can deliver best product and services for our customers 🌍



# “ The Trade Relationship & Collaboration in Aviation Between the United Kingdom and Türkiye ,”



by Kenan Poleo, United Kingdom Consul General İstanbul & Trade Commissioner Eastern Europe & Central Asia

The United Kingdom and Türkiye share a growing trade partnership in aviation, and we are committed to expanding our collaboration in this field.

Hosting some of the world's most innovative service and engineering companies, the United Kingdom is ready to support Türkiye's global expansion in aviation.

We are already witnessing great developments in this field. The recent agreement by Turkish Airlines to finalize the acquisition of 220 Airbus aircraft, with a significant

portion of their engines provided by the UK-based Rolls Royce, is a clear example of what the two countries can achieve together.

## Innovation Heritage

The United Kingdom utilizes the latest technologies in the following areas based on an engineering culture rooted in research and development:

- *Strategic Advice*
- *Design*
- *Construction and Engineering*
- *Equipment and System Provision*
- *Operations*

The United Kingdom's aviation supply chain

operates in over 100 countries, including the world's top 60 international airports. In addition to having extensive experience in the design, planning, and construction of new airports, UK companies are also eager to provide solutions tailored to the needs of their partners in Türkiye, leveraging their expertise in airport and air traffic control management.

## Sustainable Aviation

Türkiye has an ambitious energy transition agenda and a net-zero emissions target for 2053. The aviation sector will play a significant role in meeting these goals and achieving the desired growth of the industry. Considering the experience of UK companies in sustainable aviation solutions, I believe they are competent

in assisting Türkiye in achieving these objectives.

These solutions encompass key environmental issues such as CO2 reduction, noise management, air quality, biodiversity, surface and groundwater pollution, as well as efficient management of resources such as energy, waste, and water.

## Future Partnerships

As discussions continue to expand the existing Free Trade Agreement between the United Kingdom and Türkiye, and as our business relationships grow, now is undoubtedly the right time for companies in Türkiye to begin working with the United Kingdom.

Feel free to contact my team to learn more.



## "Qatar Airways is proud to have been flying between Doha and Istanbul for the past 20 years."

An exclusive interview with Evren Ökmen, Qatar Airways Country Manager - Türkiye

**Şebnem Akalın:** Mr. Ökmen, thank you taking the time to speak with us. Would you mind sharing some insights about your background and experience in the field of aviation?

**Evren Ökmen:** My main career focus has always been the travel industry. Working in many different areas of the business helped me to have a broad understanding of this vast network. My journey began when I started working as a licensed professional tour guide during my university years. Following my graduation, I worked for several travel agencies. Then in 1999, my aviation career started when I joined TAL Aviation

(the GSA company of American Airlines, Qantas and Jet Airways) as a Sales Executive. After 3 years of service there, I moved to Emirates which I worked as a Sales Executive for 8 years. My next post in the aviation sector was with Flydubai as the GSA Manager for Turkey for 2 years. In 2018, I joined Qatar Airways taking the position of Sales Manager – Turkey and in since 2021 I've been leading the office as Country Manager - Turkey.

**Şebnem Akalın:** How many flights per day does Qatar Airways operate directly to Istanbul's 2 airports, and what type aircraft are used for these routes?

**Additionally, what cabin options are available for passengers on these specific aircraft types?**

**Evren Ökmen:** Qatar Airways is proud to have been flying between Doha and Istanbul for the past 20 years. We currently operate 35 weekly flights between Doha and Istanbul, with 18 per week to Sabiha Gökçen International Airport and 17 to Istanbul Airport. These flights take place on a mix of Airbus 320 and 350 and Boeing 777 and 787 aircraft.

**Şebnem Akalın:** Besides Istanbul, your airline offers direct flights to Doha from various cities across Türkiye, making it a favored choice among Turkish travelers

**heading to Far Eastern destinations. Could you inform us about the current cities with direct flights to Doha and any plans to expand your network by adding new cities in-the-near-future?**

**Evren Ökmen:** We also currently fly five times a week to Ankara and in summer, we plan to operate flights to Adana (3x weekly), Antalya (5x weekly), Bodrum (3x weekly) and Trabzon (3x weekly). All routes are currently bookable via [qatarairways.com](http://qatarairways.com)

**Şebnem Akalın:** What are the upcoming plans for Qatar Airways' fleet expansion, considering





its reputation for maintaining one of the youngest fleets among airlines? Additionally, could you share insights into the new destinations that might be introduced with the arrival of the pending aircraft orders?

**Evren Ökmen:** We recently revealed our latest 2024 network expansion plans, which include the launch of flights between Doha and Hamburg for the first time starting in July. Qatar Airways will also resume flights to Venice in June, while there will be frequency increases on popular European routes, including Malaga, Nice, Prague, Sarajevo, Sofia, Warsaw and Zagreb.

For Turkish travelers looking to head East, Qatar Airways has also added additional flights to Bangkok, Colombo and Kuala Lumpur starting in April.



In terms of the Qatar Airways fleet, we currently have more than 250 aircraft, including Cargo, and as of December we have firm orders for 146 passenger aircraft.

**Şebnem Akalın:** Over the past decade, you've consistently received the prestigious Best Business Class Award. What exclusive services and privileges can passengers expect when flying Business Class with your airline?

**Evren Ökmen:** Qatar Airways' award-winning Qsuite is about more than just the extremely comfortable, fully lie-flat bed, although this is also a major selling point! For our Business Class passengers, the world-class journey begins from the moment they set foot in the airport, with a dedicated, speedy check-in, refreshments, lounge access and priority boarding. Once on-board, the Qsuite offers

spacious and elegantly designed private suites with exceptional service and restaurant-quality, on-demand dining. Ambient lighting provides a calming atmosphere to help passengers adjust to different time zones and the extra space and privacy – along with a 'do not disturb' feature – is ideal for both work and relaxation. Passengers also receive luxury amenity kits from Diptyque and The White Company pyjamas.





## INTERVIEW



Our Business Class passengers are provided exclusive treatment upon arriving at Hamad International Airport in Doha. The Al Mourjan Business Lounge makes transiting through DOH an unparalleled customer travel experience, and has been thoughtfully designed in a resort-like setting, with an

incredible water feature and greenery, making it easy to forget you're in an airport. The lounge offers the World's Best Business Class Lounge Dining (awarded by Skytrax 2023) with international delicacies and an à la carte restaurant, conference rooms and private workstations, single and double "quiet

rooms" with recliner chairs and private family areas with entertainment rooms, a children's nursery and a dedicated games room.

Last year, Qatar Airways also opened its new 'Business Lounge, overlooking the tropical gardens and water features of the airport's impressive 'The Orchard'. The lounge creates an

immersive experience in a serene atmosphere, with quiet rooms and scenic relaxation areas, a fitness studio, spa facilities and a children's nursery.

**Şebnem Akalın:** In today's context, sustainability stands as a critical concern, and numerous airlines exhibit their commitment to environmental awareness through their choice of fuel and engagement in recycling initiatives. Could you elaborate on Qatar Airways' investments and initiatives pertaining to environmental sustainability?

**Evren Ökmen::** Qatar Airways remains absolutely committed to protecting the environment as much as we are committed to the passenger experience. As a oneworld member airline, we are dedicated to achieving net zero carbon emissions by 2050.

Qatar Airways continues to operate one of the youngest fleets in the sky, which allows us to control carbon emissions and noise pollution.

The airline is also committed to supporting the industry's development of sustainable aviation fuels. We're working diligently with all industry stakeholders to establish a viable pathway for the adoption of SAFs and we've set an ambitious target of 10% SAF usage by 2030 🌱



# ILA BERLIN

PIONEERING AEROSPACE



© Airbus SAS 2020

Berlin ExpoCenter Airport  
**June 5 – 9, 2024**

[www.ila-berlin.com](http://www.ila-berlin.com)

**MEET THE WORLD'S  
AEROSPACE PIONEERS**









# Leonardo Helicopters

## Leader of the Turkish Commercial Helicopter Market

Leonardo Helicopters (formerly known as AgustaWestland/AW), one of the world's leading commercial and military helicopter manufacturers, hosted our magazine on January 29-30, 2024, to provide firsthand information about its numerous activities, including commercial and military rotary-wing product range, Customer Support and Training Services tailored to customer needs and supported by digital, synthetic, and virtual/augmented reality capabilities, Simulation Training Center, its performance in 2023, ongoing projects in Türkiye, and future goals. During the visit, they also introduced the Leonardo Training Academy in Sesto Calende, the Final Assembly and Flight Lines in Vergiate, and the Cascina Costa facilities near Milan.





by İbrahim Sünnetçi

I had the opportunity to visit Leonardo Helicopters' Training Academy located in Sesto Calende in Northern Italy and its facilities in Vergiate and Cascina Costa for the first time during the press tour held between May 26-28, 2014. With this latest visit, I observed firsthand how the company has undergone a technological transformation over the past decade and to what extent it has incorporated digital and virtual reality technologies into the design, production, and user technical support infrastructure, as well as the training system.

As part of the event, on the morning of January 29, 2024, we visited the Leonardo Training Academy (Alessandro Marchetti Training Academy) located in Sesto Calende and



received information from Paolo PETROSSO, VP of Simulation and Training Services at Leonardo Helicopters, regarding the Customer Support and Training Services

provided by the company. Additionally, we were informed about the training simulators (new Virtual and Extended Reality Simulator [VxR] with motion system and representing AW119Kx

IFR variant and MITHOS [Modular Interactive Trainer for Helicopter Operators]) used at the Academy and the new engineering support services called 'Digital Customer Experience,' which are provided by Leonardo Helicopters within a historical building, on a 24/7 basis, to the customers upon request. We toured the Final Assembly and Flight Lines of Leonardo Helicopters in Vergiate in the afternoon. Leonardo utilizes digital manufacturing technologies at Final Assembly line in Vergiate. Due to confidentiality, we weren't allowed to take photographs at the facility, where tests are conducted for the



Cem Akalın & Ayşe Akalın & Paola Petrosso, Sergio Scodanibbio, Bade Özsoy



production, assembly, and acceptance of military and civilian helicopters. We also saw the last batch of three AW119Kx Next Generation Basic Training Helicopters of the Turkish Army Aviation School Command at the Final Assembly (one helicopter) and Flight Lines (two helicopters). Deliveries of these three AW119Kx Helicopters are expected to be completed in April 2024. In Vergiate, as Defence Turkey Magazine, we also had the opportunity to experience an exclusive 30-minute flight over the picturesque city of Vergiate, renowned for its natural beauty, and the breathtaking Swiss Alps, accompanied by the

stunning lake view, aboard the AW189 Helicopter offered by Leonardo Helicopters for both the VIP/Utility and Energy sectors in Türkiye's civil helicopter market. The first

production model of the AW189 made its first flight in October 2013 at the Vergiate plant. The AW189 is designed for multiple roles, including offshore transport, passenger transport, search and rescue (SAR) and parapublic missions. The AW189 has an 11.2m<sup>3</sup> spacious main cabin that provides for a choice in configuration. It can accommodate up to 18 seats. The cabin has large sliding doors and a single or dual rescue hoist above the door. Two external life rafts are provided in the cabin. The helicopter has a standard auxiliary power unit (APU) that allows air conditioning in both the cabin and the cockpit even when the main engines are not running. The AW189, in which we, registered in October 2014 with the tail number I-LCIH, is powered by a pair of GE CT7-2E1 Turboshift Engines and is one of the first production helicopters of its kind. Since the AW189 we flew in was

one of the early production models, it did not feature an Active Vibration Control System in its avionics equipment. Nevertheless, the cabin, which accommodates 16 seats for passengers and features large windows (a total of 8) that can slide open sideways, was remarkably quiet during the flight, with a very low vibration level. This is because the rotor blades used in the AW189 are designed to dampen their own vibrations by utilizing inertial forces to overcome aerodynamic oscillations. In recent years, the AW189 Helicopter has seen significant demand from the offshore Energy Sector and Search and Rescue (SAR) operators due to its rugged construction, long range, and high performance. It is also being considered for both the General Directorate of Security Aviation Department and the Turkish Coast Guard Command's SAR Helicopter requirements.







Both institutions have held discussions with Leonardo Helicopters regarding the AW189 Helicopter. As of January 2024, more than 140 firm orders have been received for the AW189 Helicopter, excluding options, with 90 of these already delivered to users in 10 countries worldwide. According to Leonardo Helicopters data, as of January 2024, there are 46 AW189 helicopters operating in the parapublic market, accumulating over 52,000 flight hours in total with these helicopters.

At the Vergiate facilities, we also received information about the interior designs of helicopters produced for the VIP and corporate transport market. Additionally, we attended a comprehensive presentation which covered the company's past and present, product range, market position, future goals and strategies, and ongoing research into new aircraft technologies.

On the second day of our visit, we first toured the facilities in Cascina Costa, which also serves as the headquarters of Leonardo Helicopters. Here, we learned about the Digital Simulation Laboratory and the AW609 Tiltrotor Digital Development Simulator, which form the core of Leonardo Helicopters' Digital Twin design capability. These facilities were established approximately 1.5 years ago. Additionally, we received information from officials about the AW609 Tiltrotor Aircraft Program, which is currently undergoing flight testing as part of its civil certification process. Launch customer Bristow Group's first AW609 was assembled in AW609 Final Assembly Line in Philadelphia, USA.

Leonardo Helicopters offers a diverse range of aircraft spanning from 200kg class AWHERO Rotary Wing Unmanned Aerial Systems (RUAS) suitable for civilian/commercial and military/parapublic use to 1.8-ton single-engine AW09 helicopters, 16-ton three-engine AW101 helicopters, and the 7.5 class Tiltrotor AW609 aircraft, covering the entire weight spectrum. Over 4,500 commercial and military helicopters from Leonardo Helicopters are utilized by more than 1,500 customers in approximately 150 countries worldwide. According to information

shared during the press tour, Leonardo Helicopters currently operates a total of 13 production facilities in five different locations: Italy, the United Kingdom (Yeovil), Switzerland (Mollis), Poland (Swidnik), and the United States (Philadelphia). In 2022, the company achieved a turnover of €4.547 Billion, received €6.1 Billion in new orders (with the total value of helicopter orders as of December 31, 2022, amounting to €13.614 Billion), generated a profit of €415 Million, and made new investments totaling €253 Million. In 2023, a total of 185 helicopters were delivered. Currently, approximately 180 Leonardo Helicopters products are successfully operating in Türkiye, with 28 serving in civilian/commercial roles and 150 in military/parapublic service (including ongoing deliveries).

## Leonardo Helicopters: 52-Year Journey from Licensed Product to Indigenous Product in the Rotary Wing Market

In 1923, Giovanni AGUSTA, Count of Cascina Costa, founded Construzioni Aeronautiche Agusta Spa. He had designed and produced his first aircraft, the biplane AG-1, in 1907. Following Count AGUSTA's death in 1927 at the age of 48, the company was



managed by his wife and eldest son, Count Domenico AGUSTA, and produced several models for military aviation between 1932 and 1945. After World War II, due to the prohibition on aircraft production in Italy stipulated in the Paris Peace Treaty and the subsequent contraction in the aviation sector, the company turned to motorcycle manufacturing to stay afloat. Operating under the name Meccanica Verghera Agusta (MV), the company initially produced a budget-friendly motorcycle with a two-stroke engine of 98cc capacity. In 1950, Italy's ban on aircraft production was lifted, and Agusta decided to venture into rotary-wing aircraft production in 1952. Initially, under license from American Bell Helicopter, they manufactured over 1,200 AB-47G helicopters, and later, in the 1960s, they produced helicopters under licenses from Sikorsky, Boeing, and McDonnell Douglas.

While continuing its helicopter manufacturing efforts under license, Agusta

also conducted research to develop its own original products. In this context, Agusta manufactured helicopters such as the A101G (production ceased after obtaining the Sea King production license), A102, A103, A104, A106, and A115, as well as aircraft engines like the GA70 and GA140. Making its entry into rotary-wing technologies with the AB-47G, Agusta achieved its first successful original product with the lightweight twin-engine AW109 Helicopter, which made its maiden flight in August 1971 and is currently in production with new models. In February 2014, the development of the new version, AW109 Trekker, featuring skid-type landing gear instead of wheeled landing gear, was announced (being the first twin-engine helicopter produced by the company to have this feature), and the EASA Certification process was completed in early 2018. Both civilian/commercial and military (AW109 LUH) versions of the helicopter have been in service with several countries.

In 1998, a joint venture company named Bell/Agusta Aerospace Company was established between Agusta and Bell Helicopter Textron to develop the 15-seat twin-engine AB139 Helicopter and the BA609 Tiltrotor aircraft. However, in November 2005, Bell Helicopter withdrew from the AB139 Program by selling its shares to AgustaWestland. Subsequently, the new helicopter was marketed under the name AW139 starting in February 2006 (from the 55th helicopter onwards). Leonardo Helicopters AW139, with civilian/commercial and military versions (such as AW139M and Boeing MH-139 Grey Wolf), made its maiden flight in February 2001. The standard gross weight of the helicopter is 6.4 tons, with a maximum gross weight of 6.8 tons (the maximum gross weight of the aircraft can be increased to 7 tons with the Increased Gross Weight Kit). As of February 2024, AW139 Helicopters have accumulated over





4 million flight hours. Leonardo Helicopters achieved significant sales success with the AW139 Helicopter shortly after its introduction in 2003, thanks to its modern and superior technical features compared to other helicopters in the same class (designed to fly at approximately 12.000ft altitude with a single engine, uniquely capable of running for 60+ minutes without oil in the main gearbox). As of February 2024, Leonardo Helicopters has delivered approximately 1.200 helicopters to around 290 commercial and military users worldwide.

Thanks to the AW139, Leonardo Helicopters achieved a faster growth rate in the commercial

sector compared to its competitors from 2004 onwards. According to company data, while Leonardo Helicopters achieved a 16% increase in civilian/commercial helicopter deliveries between 2004 and 2012, Bell achieved 10%, Sikorsky 7%, and Airbus Helicopters 4% growth rates. Russian helicopter manufacturers were excluded from the evaluation. Designed and developed with market demands in mind, the AW139, which became the best-selling helicopter in its category, propelled Leonardo Helicopters to a higher level and positioned it as a global player in the helicopter market. As part of the AW139 Program, some of the AW139 fuselages needed by the Italian

Leonardo Helicopters are manufactured and delivered at TUSAŞ facilities. AW139 Helicopter Fuselages and Tail Booms are also manufactured by PZL-Świdnik SA, a well-established aircraft and helicopter manufacturer based in Poland, which was acquired by Leonardo Helicopters in 2010.

The AW189 Helicopter, which shares a common airframe and, to some extent, shared components with the AW149, was configured to meet civil/commercial market needs and made its maiden flight on December 21, 2011. In the same year, Leonardo Helicopters acquired full ownership of the AW609 Tiltrotor aircraft from its partner, Bell. In 2012, the

AW169 made its maiden flight, and Leonardo Helicopters introduced the Family Concept to the helicopter industry, comprising the AW169 (Light Medium Weight, 4.6/4.8 tons), AW139 (Medium Weight, 6.4/6.8/7 tons), and AW189 (Super Medium Weight, 8.3/8.6 tons) helicopters, all sharing common parts, avionics, and airframe design. Leonardo Helicopters is the first helicopter manufacturer globally to implement the Family Concept. Based on the shared design philosophy for multi-role helicopters of different sizes and weights, the Family Concept not only significantly reduces operational, maintenance, and training costs but also





enhances the operational efficiency of the fleet. According to Leonardo Helicopters' data, the Family Concept enables using approximately 20% of common parts and around 30% of common maintenance equipment in helicopters while reducing training times for pilots and technicians by approximately 40%. The company's current Civil/Parapublic Product Range is classified into five categories, comprising commercial and public service helicopters: Light Single Engine (1.5-1.8 Tons, AW09, AW119 Kx, and SW-4), Light Twin Engine (3.2 Tons, AW109 Trekker and AW109 GrandNew), Light intermediate (5 Tons, AW169), intermediate (6.4-7Tons, AW139), and Super

Medium (8 Tons, AW189) and the AW609 Tiltrotor.

Previously, helicopters could only fly during daylight and in good weather conditions. However, with the advancements in avionics, satellite-based navigation systems, and new main gearbox designs allowing 50-minute 'dry run' capability, helicopters can now safely fly in both day and night, as well as in adverse weather conditions. In March 2013 Leonardo Helicopters demonstrated to the EASA a 50-minute dry run capability for the AW189 main gearbox. The AW189 is the first helicopter ever to enter service with such a capability, which is 20-minutes more than any other currently certified helicopter. The

need for dry run capability is vital for all helicopter operators but particularly for those operating in harsh environments such as the offshore sector where immediate landing is not always an option. These high-end technologies have enabled the use of helicopters in new roles such as Offshore (for offshore oil and gas platforms and offshore wind turbines), EMS (Emergency Medical Services/Air Ambulance), and SAR (Search and Rescue). The company's commercial helicopter product range is divided into five categories: Executive & Private Transport (Corporate/VIP), Energy Services (for offshore oil and gas platforms and offshore wind turbines), Medical & Rescue Services

(Air Ambulance/EMS and SAR), Security Services, and Utility (General Purpose). On the other hand, the military helicopter product range is divided into three categories: Dual Use (Military/Public Operations and Training), Naval (Maritime), and Battlefield (Utility and Combat Helicopters).

Leonardo Helicopters has entered the offshore market thanks to its reliable helicopter models like the AW139, which can carry more personnel and operate over longer ranges in all weather conditions compared to competing solutions. With the introduction of the next-generation AW169 and AW189 helicopters as part of the Family Concept, Leonardo Helicopters has



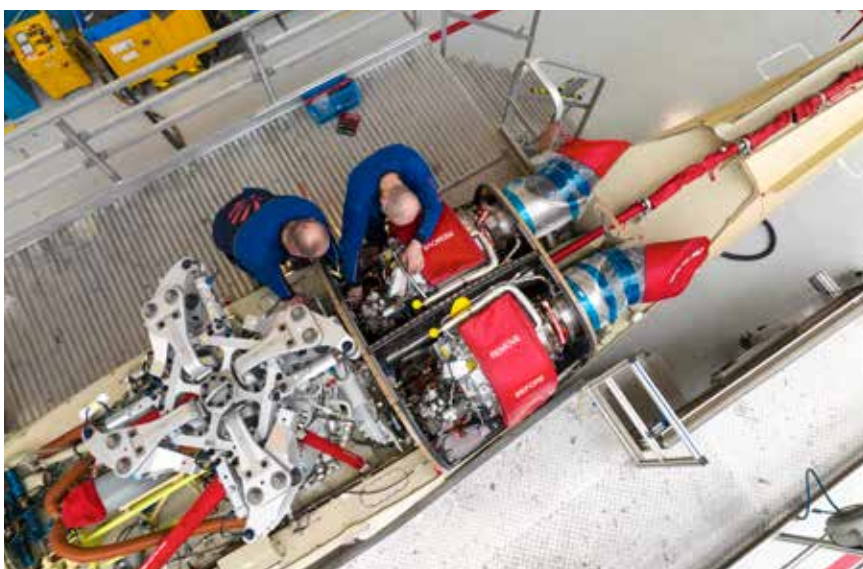
further strengthened its position in the Offshore Helicopter Market. With over 450 helicopters worldwide, Leonardo Helicopters holds the largest share of the Offshore Helicopter Market and plays a significant role in the Energy Sector, including offshore wind energy farms. Leonardo Helicopters has developed

Customer Proximity solutions that benefit the entire energy ecosystem, particularly in Norway and the North Sea. These solutions aim to improve existing equipment and provide advice and support to solve urgent issues, ensuring compliance with new standards wherever the customer needs.

Helicopters are extensively used to transport personnel and materials to offshore oil and gas platforms and offshore wind farms miles off the coast. Helicopters operating in these areas must withstand long flights over the sea, rapidly changing weather conditions and strong winds. They require high-performance, high-

capacity, long-range/ endurance, and powerful engines. These helicopters also serve as medical response vehicles in case of emergencies that may arise during operations.

Like many sectors, the Offshore Energy Sector was also affected by the COVID-19 pandemic, resulting in a significant contraction in the industry. During the COVID period, many helicopters previously operating in the offshore oil and gas market shifted to other roles. As a result, a notable demand for helicopters emerged in the sector, which started to recover in 2022, and by 2023, helicopter demand approached pre-COVID levels. However, due to ongoing supply chain issues, original equipment manufacturers (OEMs) faced challenges in ramping up production to meet the demand. Beginning in 2024, both helicopter manufacturers (OEMs) and critical subsystem suppliers have taken steps to increase production rates. For example, the engine manufacturer SAFRAN has decided to increase its engine delivery from 600 in 2023 to over 900 in 2024 and to 1,000+ in 2025 to meet the strong demand. The size of the Global Offshore Helicopter Services Market was \$2.1 Billion in 2021, \$2.89 Billion in 2022, and \$2.98 Billion in 2023. It is expected to reach \$4.47 Billion by 2030, exhibiting a Compound Annual Growth Rate (CAGR) of 6.0% until 2030.





According to Leonardo Helicopters data, more than 60% of new Oil and Gas Platforms will be installed between 100km and 250km+ offshore by 2027. This implies that at least 60% of new commercial helicopters sold by 2027 will have a range within 100km to 250km+. Based on this data, the AW169 is recommended for a mission radius of 25km-50km, the AW139 is recommended for a mission radius of 50km-200km, and the AW189 Helicopter is recommended for a mission radius of 200km-250km+. In addition, the AW609, which is currently undergoing certification testing, is also a suitable candidate for this long-range aircraft requirement with its extended range (over 700nm with external fuel tanks), high service ceiling (25,000ft), and high cruising speed (above 275 knots with pressurized cabin). The AW609 has already received its first order from the Bristow Group, which also serves this sector and is based in the United States. Furthermore, although 2023 has been difficult for some developers and turbine manufacturers due to factors such as inflation, supply chain problems, and lack of turbine standards, the offshore wind energy industry is also on a growth trend. It is estimated that there will be 460 gigawatts of offshore wind energy capacity worldwide by 2030. Türkiye has announced its



total wind capacity target for 2035 as 296 gigawatts, with a target of 5 gigawatts for offshore wind energy installations.

The Leonardo SpA Group shared its 2023 financial performance figures with the global public on February 29, 2024. Accordingly, in 2023, Leonardo Group secured new orders worth €179 Billion (a 3.8% increase compared to 2022) while raising its total revenues to €15.3 Billion (a 3.9% increase compared to 2022). The earnings before interest, taxes, and amortization (EBITA) of Leonardo SpA Group in 2023 increased by 5.8% compared to 2022, reaching €1.29 Billion. The Industrial Plan of Leonardo SpA Group for 2024-2028 was announced on March 12th. According to this plan, the Group aims to achieve a total order intake of €105 Billion, total revenues of €95 Billion by 2028, a profitability ratio of 10% by 2026, 11.5% by 2028, and to increase Free Operating Cash Flow

(FOCF) to €1 Billion by 2026 and €1.35 Billion by the end of 2028.

According to Leonardo SpA data, in 2023, Leonardo Helicopters, the Helicopter Division of the Group, achieved €4.725 Billion in turnover, €5.513 Billion in new orders (the value of the total helicopter orders as of December 31, 2023, amounted to €14.426 Billion), and €422 Million in earnings before interest, taxes, and amortization (EBITA). Although there was a decrease in the new order value in 2023 compared to 2022, Leonardo Helicopters saw a 3.9% increase in turnover, a 6% increase in order backlog, and a 1.7% increase in EBITA performance (a contract for 32 AW149 Utility Helicopters with the Polish Ministry of Defence was signed in 2022). Leonardo Helicopters contributed to the 4% increase in the 2023 revenue of Leonardo SpA Group. Despite lower sales volumes due to the higher unit costs

of military helicopters compared to civilian/commercial helicopters, the total revenue is higher. The global rotary-wing aircraft manufacturer Leonardo Helicopters delivered a total of 149 helicopters in 2022, with an increase of 36 units (a 24% increase) in the number of helicopters delivered in 2023, totaling 185 helicopter deliveries.

In 2024, both the number of new orders and the number of helicopters expected to be delivered are anticipated to be higher compared to 2023. The order quantity received during the HAI Heli-Expo 2024 Exhibition held in Anaheim, California, from February 27-29, 2024, also confirms this expectation. During the Heli-Expo 2023 Exhibition, Leonardo Helicopters secured definite orders for approximately €470 Million worth of 37 helicopters (AW139, AW169, AW109 GrandNew, and AW109 Trekker), to be delivered between 2023 and 2026 (25 of which are



AW 189 in off-shore operation

AW139, with a significant portion intended for the Global Offshore Helicopter Services Market), and also entered into a contract for optional orders of a total of 71 helicopters, including AW09 (50x), AW139 (20x), and AW169 (1x). At the Heli-Expo 2024 Exhibition, Leonardo Helicopters signed contracts for a total of 220 helicopters, with 80 being firm orders for delivery between 2025 and 2028 and 140 being part of a framework agreement for long-term supply. In this

context, The Helicopter Company (THC), owned by Saudi Arabia's Public Investment Fund, placed a firm order for 20 AW139 intermediate twins and inked a multi-year (expected to run by 2031) framework agreement for more than 130 Leonardo helicopters including AW109s, AW169s, AW139s and AW189Ks (with 2.500shp Safran Aneto-1K engines) for various applications. The US privately-owned HEMS (Helicopter Emergency Medical Service) operator

and service provider Metro Aviation will take 30 AW09s, and Sloane Helicopters, a long-time Leonardo distributor for the UK and Ireland, has agreed to order 9 AW09s, along with 2 AW109 GrandNew and 2 AW109 Trekker light twin models. The Malaysian Maritime Enforcement Agency has ordered 4 Leonardo AW189 Super Medium Helicopters through Galaxy Aerospace to meet its long-range SAR mission requirement. LifeFlight Australia has committed to purchasing

three more AW139s in addition to orders for two others announced in late 2023. During Heli-Expo 2024, Leonardo Helicopters and Bristow Group signed a framework agreement for the AW189 Super Medium Helicopters, which included 10 firm orders and options for another 10. Deliveries will run from 2025 to 2028. Currently operating 21 AW189s, Bristow will take deliveries of a further 5 AW189s by the end of this year. Bristow deploys the AW189 in its offshore Energy Services business and its Government Services business, supporting SAR operations in the UK, the Netherlands, and, starting next year, Ireland.

Belonging to the AWFamily of products, the AW189 (8.3/8.6 tons) combines superior payload and range with advanced technologies to successfully operate a wide range of missions. The AW189 is the benchmark for long-range operations and can operate in all-weather conditions, day and night, delivering high speed and superior performance also in hover and Cat. A. The helicopter features all the equipment and avionics needed to successfully carry out offshore missions and a spacious cabin to ensure a comfortable journey for passengers. Unique features of the AW189 Helicopter include the main gearbox (transmission)'s capability to run without oil for 50 minutes, a built-in Auxiliary Power Unit (APU),



AW109 Trekker in EMS configuration



optional automatic data transmission via satellite, 4G cell/Wi-Fi, and more than 200 available kits. Mostly preferred by the offshore Energy Services and SAR operations, the AW189 is powered by a pair of 2.000shp class General Electric CT7-2E1 Turboshaft Engines and 1 x Safran e-APU (60kW). Powered by a pair of Safran Aneto-1K Turboshaft Engines, each generating 2.500shp, and a Safran e-APU (60kW), the AW189K version is usually preferred for Executive & Private Transport services.

## Leonardo Helicopters and Türkiye

A significant portion of civil/commercial helicopters in our country consists of twin-engine helicopters (which make up about 86% of the market). With the delivery of various types of 28 helicopters, Leonardo Helicopters holds a market share of approximately 48-50% in both the twin-engine and single-engine helicopter markets in Türkiye. Of these helicopters, 49% are VIP, 30% are EMS, 14% are Civil Utility, and 7% are used in the Energy Sector. The VIP helicopters used in our Türkiye are predominantly AW109 GrandNew and AW139 models. The AW139 holds a leading position in the civil/commercial helicopter market in Türkiye. Single-engine helicopters used in our country mostly consist of Leonardo Helicopters



AW 109 GrandNew

AW119 and Airbus H130 models. Kaan Air, Setair, and Redstar are the operators with the largest Leonardo Helicopters fleet in our country. Leonardo Helicopters has become a preferred actor in the Turkish Civil/Commercial Helicopter Market due to its ability to offer the most suitable and fastest helicopters in their classes (AW119Kx, AW109, AW139, AW169, and AW189) for the challenging operating conditions in Türkiye. Leonardo Helicopters collaborates with Kaan Air, the sole authorized distributor for the commercial sales and after-sales support services of their helicopters in Türkiye.

As the offset obligations of the Martı Project, which was initiated in 2004 with the coordination of the Secretariat of Defence Industries (SSB) to meet the SAR helicopter needs of the Turkish Coast Guard Command, Leonardo

Helicopters signed a contract with TUSAŞ in March 2004 for the fuselage production of the twin-engine AW139 Helicopter, as a second source at TUSAŞ facilities.

Under the contract signed between the two companies in 2004, an initial order was placed for 250 units of AW139 Helicopter Fuselage and Canopy, and the number was further increased with subsequent orders. The first fuselage produced at TUSAŞ facilities was shipped to Italy in December 2006, and deliveries of helicopter fuselages in two separate configurations, Search and Rescue (SAR) and Offshore, began in 2012. The 250th AW139 Helicopter Fuselage produced at TUSAŞ facilities was delivered in a ceremony held in 2014 with the participation of representatives from Leonardo Helicopters, and in the same year, the two companies reached

an agreement to extend the AW139 Helicopter Fuselage and Canopy Production Program for at least three more years. As of the end of 2020, TUSAŞ had delivered 368 units of AW139 Helicopter Fuselage and Canopy to Leonardo Helicopters and received orders for an additional 80 fuselages and canopies to be delivered by the end of 2021 under the renewed contract.

## AW119Kx Next-Generation Military Training Helicopter

To meet the Next Generation Basic Training Helicopter requirement of the Turkish Army Aviation School Command, a tender was opened by the SSB, and on July 26, 1999, a Request for Proposal (RFP) was published. As part of the Next Generation Basic Training Helicopter requirement, the AW119Kx



Next Generation Trainer of the Leonardo Helicopters was selected, and a contract was signed between the Secretariat of Defence Industries (SSB) and Leonardo Helicopters on April 5, 2021, for the procurement of 15 AW119Kx IFR variant Next Generation Basic Training Helicopters (with an option for +15 more).

The first batch (3 units) of AW119Kx IFR variant helicopters was delivered in March 2023 and was added to the Turkish Army Aviation School Command's inventory in May 2023. The fourth batch of 3 helicopters was brought by ship from Italy to Türkiye in the last week of January 2024, and after necessary preparations were made, they were flown to the Army Aviation School Command in Isparta. The inspection and acceptance activities for these 3 AW119Kx Helicopters were completed during the first

half of February 2024. As part of the AW119Kx IFR variant Next Generation Basic Training Helicopters Project, 2 Instructor Pilots and 2 Examiner Pilots from Turkish Army Aviation were sent to Leonardo Helicopters facilities in Italy. These pilots later participated in the training of other Instructor Pilots in Isparta. Subsequently, Instructor Pilots receive Examiner Pilot Training. HAVELSAN is also expected to produce and deliver two flight simulators under the Isparta KAHOSİM (Army Aviation School Simulator Center) Project specifically for AW119Kx Helicopters, which have the necessary avionics equipment for Instrument Flight Rules (IFR). In this context, the necessary software and source code for 2 simulators will be procured from Leonardo Helicopters. During our visit to the Leonardo Training Academy in Sesto Calende,

we had the opportunity to see the new Virtual and Extended Reality Simulator (VxR) developed for the AW119Kx Helicopter during the training. Compared to Level-D Full-Flight Simulators, the full-scale VxR Simulator, representing the AW119Kx IFR variant and featuring a cockpit, motion, and instructor console, has a much more compact structure and lower cost. After disassembly, the AW119Kx IFR variant VxR Simulator, with a total weight of approximately 1.5 tons, can be easily transported to another location in two separate wooden crates. Leonardo Helicopters showcased its AW119Kx IFR variant Virtual and Extended Reality Simulator (VxR) for the first time during Heli-Expo 2024 in February 2024. The VxR features a compact footprint to support single-engine (VFR and IFR) and light-twin-engine helicopters,

guaranteeing accurate pilot's perception of the surroundings for single-pilot flight operation, improving training effectiveness and safety and allowing the crew to train on the same mission through interconnected simulators. The VxR also delivers outstanding cost/effectiveness thanks to its reduced footprint and infrastructure requirement, allowing accessibility in those areas where simulation is primarily needed by reducing acquisition and training costs and enhancing operation safety for light helicopter models.

As of January 30, 2024 the Turkish Army Aviation School Command was conducting trainings only for Instructor Pilots, Examiner Pilots, and Technicians with the 9 AW119Kx Helicopters in its inventory and had plans to utilize a total of 12 AW119Kx Next Generation Training Helicopters, the deliveries of the fourth batch of 3 helicopters were completed in February, in the Basic Pilot Flight Course starting from March 2024. The fifth and the last batch of AW119Kx IFR variant Next Generation Basic Training Helicopters (3 units) are expected to be brought to Türkiye by ship from Italy by the end of March 2024, and to be inducted into Turkish Army Aviation School Command's inventory during April 2024 following the completion of inspection and acceptance activities. Fitted with a modular fuel



system the Turkish Army's AW119Kx IFR variant Helicopters can stay in the air continuously for 4.5 hours with the 558kg (1.232lb) internal fuel carried in the 4-Cell Fuel System (four crash-resistant internal fuel tanks, they do not cause any reduction in cabin volume). The Turkish Army Aviation School Command also has plans to acquire the maintenance and repair capability for the blades of AW119Kx Helicopters (which have four blades) at the 5th Main Maintenance Factory Directorate facilities. As of March 2024, negotiations with Leonardo Helicopters were still ongoing.

The AW119Kx IFR variant Next Generation Basic Training Helicopter, with a maximum take-off weight (MTOW) of 2.850kg, will assist pilot candidates in demonstrating their piloting abilities through its Digital Cockpit architecture and 3-Axis Automatic Flight Control System (AFCS). The AW119Kx IFR variant delivered to the Turkish Army Aviation School Command features the Genesys Aerosystems IDU680-IFR glass cockpit, enabling IFR flight. Among the avionics equipment used in the helicopter are additional auxiliary systems such as the 3D Synthetic Vision System (SVS), Sky View, Helicopter Terrain Awareness and Warning System (HTAWS), and Highway In The Sky (HITS) Traffic Alert & Collision Avoidance System, which significantly



AW 119 Next Generation Basic Training Helicopter

reduce the pilot's workload and contribute to situational awareness. Helicopter Terrain Awareness Warning System (HTAWS) is designed to reduce the risk of Controlled Flight Into Terrain (CFIT) accidents for rotary-wing aircraft during cruise in Visual Meteorological Conditions (VMC) and Instrument Meteorological Conditions (IMC) by enhancing situational awareness of surrounding terrain and obstacles. AW119Kx's state-of-the-art glass cockpit is similar to advanced helicopters (such as UH-60M/T-70) making pilots transition easier thus lowering risks. The AW119 IFR is the benchmark as New Generation Multirole Trainer.

Powered by a Pratt & Whitney PT6B-37A Turboshaft Engine, with a maximum continuous power of 872shp and a take-off power of 1002shp, the AW119Kx is the largest single-engine light

helicopter in its class. In the AW119Kx Helicopters, one Instructor Pilot and Student Pilot can sit in the front, and three Observer Student Pilots can sit in the back. This configuration allows for simultaneous training of a Student Pilot and an Instructor Pilot during a sortie, while the three Observer Student Pilots seated in the back can undergo observation-based training at the same time.

However, according to the information I acquired during our visit to the Turkish Army Aviation School Command, located at Isparta Kılıç Airport (next to Süleyman Demirel Airport) between November 27-29, 2023, the AW119Kx Helicopters, which are capable of comfortably accommodating five individuals (Instructor Pilot, Student Pilot, and 3 Personnel/Observer Student Pilots) will only have 1 Observer Student Pilot seated in the back. Whether

the AB-206B Jet Ranger III Training Helicopters, also produced by all Leonardo Helicopters and inducted into the service during 1996, in the inventory will be completely phased out depends on how effectively the AW119Kx IFR variant Helicopters will be utilized. With the current fleet, the Army Aviation School attempts to keep 30 Training Helicopters (AB-206B, UH-1H, and AW119Kx) airborne simultaneously, so if the AW119Kx proves itself, placing a definite order for the additional 15 helicopters defined on the contract may become an option in the near future. Night vision goggle (NVG)-compatible (which is not available in AB-206Bs) AW119Kx Helicopters are also used for night training flights, and we had the opportunity to observe a night flight conducted by AW119Kx Helicopters on the evening of November 27, 2023 🌙



# Disruptive Technology in Air Transportation: **The AW609 Tiltrotor**

The AW609 Tiltrotor is built on the technological know-how obtained under the experimental tiltrotor XV-15 Program of Bell/Boeing Partnership, which was formed in 1996 to develop a civil tiltrotor aircraft. Boeing left the XV-15 Program in March 1998 and Agusta (now Leonardo Helicopters) joined the Program as a partner in September 1998. Following Agusta's involvement in the Program, the development of the aircraft named BA609 and carried out by the Bell/Agusta Aerospace Company (BAAC), a Bell-

Agusta Joint Venture company. During the 2011 Paris Air Show, in June 2011 AgustaWestland stated that it will assume full ownership of the Program, and in November 2011, all ownership of BA609 Tiltrotor Program was acquired by AgustaWestland. After purchasing the rights from its partner Bell, BAAC was closed and development responsibility was transferred to AgustaWestland Tiltrotor Company (AWTRC) in Arlington, Texas and the name of the aircraft was changed to AW609.

Combining the VTOL (vertical take-off and landing) capability of a helicopter with the speed and range of a conventional fixed-wing aircraft a tiltrotor is an aircraft that generates a lift and propulsion by way of one or more powered rotors mounted on rotating shafts or nacelles located at the wingtips.

The AW609 is powered by two modified Pratt & Whitney Canada PT6C-67A Turboshaft Engines, each drives a three-bladed powered rotor and generates 1.940shp for normal

operation and 2.492shp for 30 seconds under one-engine-inoperative (OEI) conditions. In the event of a single engine failure, either engine can provide power to both powered rotors (proprotors) via a drive shaft. The AW609 is also able to carry out a successful and safe autorotational landing from cruising altitude. The 9- to 12-seat AW609 Tiltrotor is able to take-off and land vertically like a helicopter but achieving higher speeds, altitude and range than a conventional rotary-wing aircraft. The all-weather tiltrotor





AW609 is designed to fly at 270kts and 25,000ft. With an 18,000lb maximum takeoff weight (MTOW), 6,000lb+ useful load, and 750nm range, the fly-by-wire AW609 is poised to change the face of civil aviation by giving operators a - huge speed and range advantage over a conventional helicopter. The AW609 can take off vertically at 16,800lb weight. At the 18,000lb MTOW, a running takeoff would be necessary with nacelles tilted at approximately 75 degree. In the full helicopter mode (nacelles vertical), the AW609 can hover out of ground effect (HOGE) at 6,000ft and in ground effect (HIGE) at 10,000ft, both under ISA conditions. The AW609's advanced



Night-Vision Goggle (NVG) compatible Collins Aerospace's Pro Line Fusion System avionics (first utilized on AC4), with three 14-inch touchscreen displays, enable greater situational awareness, while the fully digital, triple redundant fly-by-wire flight control system reduces pilot workload. The Pro Line Fusion System is also compatible with TCAS II, ADS-B, and the Rockwell Collins Multi-Scan Threat Detection Weather Radar, offered as a customer option.

Within the scope of AW609 Tiltrotor Program, the world's first multirole tiltrotor program designed to be civil certified, Leonardo Helicopters manufactured 4 AW609 prototypes for the flight and certification tests. The first prototype (Aircraft 1, N609TR, designated AC1), which made its first flight on March 6, 2003 at the Helicopter Flight Test Center at Arlington Municipal Airport, Texas, and is used for ground testing in Italy, which includes endurance tests of the AW609's rotor and drive system. The AW609's

drive system and five gearboxes have completed 30-minute run-dry testing successfully. The second prototype (Aircraft 2, N609AG) had been used for the development of new installations. It crashed and burst into flames during a maximum dive-speed test on October 30, 2015, over northern Italy, killing test pilots Herb MORAN and Pietro VENANZI. Following the comprehensive investigation of the accident the National Agency for the Safety of Flight of Italy determined that the test aircraft, during trials dictated by the FAA certification process, achieved a maximum airspeed of 306 knots (AW609's Vne [never exceed speed] is 283 knots) before uncontrollable oscillations (similar to Dutch roll) forced the proprotors to deform and strike the leading edges of the wings, severing fuel and hydraulic lines and culminating in an inflight breakup. The third prototype (Aircraft 3, N609PA) is conducting engine-handling performance and load-level surveys in Philadelphia, US. It

was utilized during icing and high altitude-high temperature certification tests in Michigan. The AW609 is said to be designed for flight into known icing conditions and meets the highest FAA requirements for both fixed-wing aircraft and helicopters including single-engine operation and autorotation. The fourth prototype (Aircraft 4, N609PH), built in Philadelphia in production configuration, made its first flight on December 23, 2019. As the last prototype and equipped with production avionics, the AC4 is used for mechanical-systems and avionics testing in Italy and conducts customer demonstrations. The AC4 is equipped with a new landing gear and a newly configured and widened cabin door. After discussions with EMS and SAR operators, the company enlarged the entry door on the starboard side to 35 inches and modified it from a side-opening configuration to a vertical clamshell door with an electric hoist mounted to the upper section, if required for the SAR role.

The increased width allows a stretcher to be brought into the cabin using a winch and then rotated lengthwise. The winch is planned to be capable of lifting a 600-pound load. To provide more headroom in the cabin, the company lowered the floor. All of the prototypes are currently involved in the last stages of testing activities ahead of (Federal Aviation Administration) FAA certification. During our visit to Leonardo Helicopters' Cascina Costa facility on January 30, 2024 we had the opportunity to see the AW609 prototypes AC1 (N609TR) and AC4 (N609PH) in the hangar. At the time of our visit, the N609PH prototype was being prepared for flight testing.

Within the scope of AW609 Tiltrotor Program, the first production AW609 (Aircraft 5, N609LH), made its maiden flight on October 13, 2022 at Leonardo Helicopter's final assembly line in Philadelphia, US. Retained by Leonardo the AC5 was initially conducted ground-based certification trials, including indirect effects of lightning strikes and high-intensity radiated fields testing. Then it joined the ongoing flight-test certification program in Philadelphia. Both AC4 and AC5 are equipped with production avionics and are being used for

demonstrators in their prospective markets. The final assembly of the second production AW609 (Aircraft 6, N609LE), the first customer aircraft (for Bristow Group), was also completed in 2022 at the Philadelphia facility and it was registered on August 4, 2022. As of January 2024 the production configuration has been frozen, with the second production aircraft due to join the test program during 2024. The AW609 Tiltrotor will enter into service with AC6, which is the second production configuration aircraft.

In 2015, AgustaWestland reported that one of the AW609 prototypes flown 721 miles (626nm) from Yeovil in the UK to Milan, Italy in 2 hours and 18 minutes. In November 2021, Leonardo Helicopters flew AC4 (N609PH), the last prototype, but fully production representative, 2,550nm from its facility in Cascina Costa, Italy, to the Dubai Airshow, UAE. It was the AW609's first appearance in the region. On May 11, 2022 the global leader in vertical lift solutions and launch customer for the AW609 Tiltrotor in the United States, Bristow Group, participated in a sixty-minute demonstration flight in Philadelphia marking an important milestone as Leonardo and Bristow collaborate to introduce the AW609 aircraft into service. In



March 2022 the AW609 user base was further expanded with the addition of an undisclosed long-established European operator of Leonardo Helicopters' 4 AW609 Tiltrotor to carry out a range of passenger transport missions supporting its point-to-point operations worldwide. The AW609 Medical Equipped Cabin (EMS interior) mock-up was displayed for the first time at Association of Air Medical Services, which took place in Tampa, Florida, from October 24 - 26, 2022. The AW609 Medical Equipped Cabin can board up to 5 medical crew members and one patient on a

stretcher. In October 2022, AC3 (N609PA) made the AW609's National Business Aviation Association (NBAA) debut in Orlando, Florida, with a full-scale VIP/Corporate cabin mock-up on exhibit. In VIP/Corporate configuration the AW609s will be fitted for between 5 to 7 passengers, with options for Wi-Fi, a forward lavatory with a hard door, and a small galley. The lavatory seat will not be certified for take-off and landing. On February 22, 2023 pilots from the Federal Aviation Administration (FAA) flew the AW609 Tiltrotor for the first time. Performed in AW609 AC4, the production representative development aircraft,





the flight was a pre-TIA (Type Inspection Authorization) activity. With the completion of this flight successfully the AW609 Tiltrotor Program moved forward to the final stage of the FAA certification process. During March 16-17, 2023 pilots from the European Union Aviation Safety Agency (EASA) flew for the first time the AW609. The flights took place in Cascina Costa, Italy were part of the first round of EASA's familiarization activities for the AW609 Certification Program. In mid 2023, the FAA released the certification basis, another major step towards the type certificate.

As of mid-January 2024, the AW609 Tiltrotor Program test fleet has accumulated some 1,900 flight hours in the US and Italy. The AW609 Tiltrotor entered the final stage of certification testing activities in February

2023 (with the flight of FAA pilots) and Leonardo Helicopters is hoping to complete all activities required for certification of its long-awaited AW609 Tiltrotor by early 2025.

According to Leonardo Helicopters the AW609 has a slightly higher procurement cost than a conventional helicopter in the same weight class, however, its operating cost will be lower than a helicopter in the same weight class, and it will also consume less fuel compared to a conventional helicopter in the flight to the same distance. The AW609 has strong interest around the world in all five mission sets: VIP, Corporate, Offshore, EMS, and SAR. Once certified, the AW609 Tiltrotor will be the first tiltrotor to enter commercial service. The aircraft can take off and land vertically, and carry up to 9 people in a

pressurized cabin at twice the speed and range of a typical helicopter. Thanks to its rotorcraft-like versatility and airplane-like performance the AW609 will revolutionize air transport.

### Leonardo & Bell Signed an MoU to Bring Tiltrotor Technology into the European Market

During Heli-Expo 2024 on February 28, 2024 Bell Textron Inc., a Textron Inc. company, and Leonardo S.p.A., have signed a Memorandum of Understanding (MoU) to evaluate cooperation opportunities in the tiltrotor technology domain. Sharing a multi-decade history of industrial cooperation on both traditional helicopters as well as tiltrotor technology collaboration Leonardo and Bell have teamed to explore cooperation





in a bid to bring tiltrotor helicopter technology into the European market. “The cooperative effort will begin in earnest with the NATO Next Generation Rotorcraft Capability (NGRC) Concept Study #5, where Leonardo will take the lead on a tiltrotor architecture proposal with Bell in support,” they said.

NATO’s NGRC Project aims to develop replacement solutions to fill capabilities of medium multi-role helicopters currently operated by Allies that will reach the end of their life in 2035 to 2040. Under that program, rotorcraft OEMs are being challenged to leverage recent advances in technology, production methods, and operational concepts in developing these new aircraft.

“This cooperative effort between Bell and Leonardo reflects our shared vision that next generation rotorcraft will be influenced by the speed, range and maneuverability only tiltrotor technology

can deliver,” said Lisa ATHERTON, Bell President and CEO. “We are proud to deepen our relationship with Leonardo as we continue to explore emerging vertical lift programs in Europe and the United States.”

Gian Piero CUTILLO, Managing Director of Leonardo Helicopters, said “We’re thrilled to evaluate new joint efforts for the next generation of rotorcraft technologies, based on our solid and shared view of the unique advantages of tiltrotors. Leonardo has always firmly endorsed tiltrotor technologies to meet evolving rotorcraft requirements, even more so as new needs emerge in the market.”

On February 29, 2024 touching upon Leonardo’s recent MoU with Bell to evaluate cooperation opportunities in the tiltrotor technology domain, Leonardo CEO and General Manager Roberto CINGOLANI

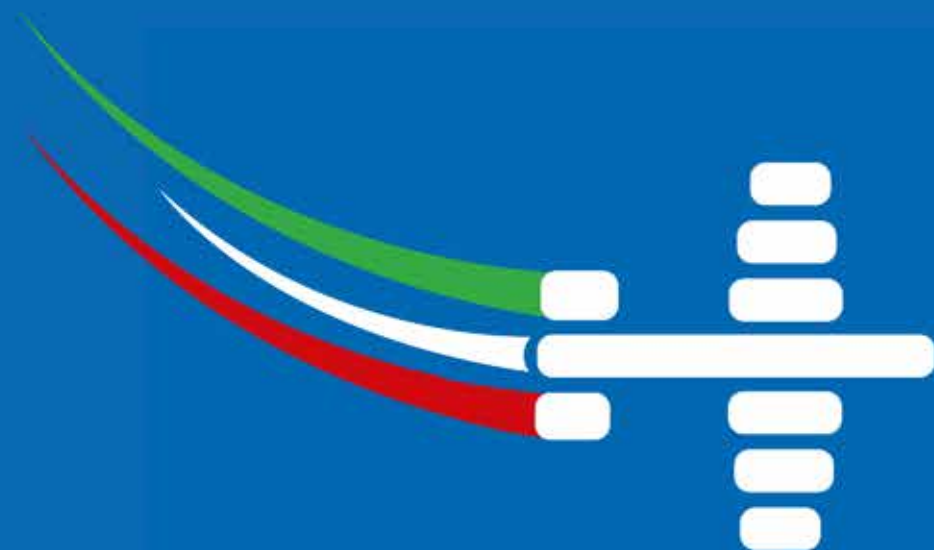
pointed to the U.S. Army’s decision in February to cancel the Future Attack Reconnaissance Aircraft (FARA) Program and underlined that the U.S. Army wants speed, range, cabin pressurization, and vertical takeoff and lift parameters that are not available in traditional helicopters—but that lends itself to tiltrotor. “That, for us, was super good news” because it supports the decision to invest in the AW609 civil tiltrotor. “We are the only European company having a tiltrotor close to certification, primarily for civil application, that can be transformed for strategic applications.” He further stressed that Bell is the only other company with such technology and that the two companies share the original design of the AW609. “We developed two synergistic and complementary models (AW609 and V-280 Valor). They have a big heavy payload. We have the light payload.”

In February 2024, the U.S. Army has announced the cancellation of the Future Attack and Reconnaissance Aircraft (FARA) Program, which covers the procurement of a high-speed aircraft that would fill the armed scout role left vacant by the retired OH-58D Kiowa Warrior. Despite the dramatic upheaval impacting FARA, its sister Future Long Range Assault Aircraft (FLRAA) Program is continuing as planned, with the Bell V-280 Valor is set to inducted into service in 2030. Bell’s US Army’s FLRAA Program win in December 2022 with the V-280 Valor tiltrotor provides validation for Leonardo’s investment in the civilian AW609. Bell was initially awarded the FLRAA contract in December 2022, selected over the Sikorsky-Boeing Defiant X. However, the Sikorsky-Boeing team subsequently protested to overturn the decision, but this was denied by the U.S. Government Accountability Office in April 2023, giving Bell the green light to push on with the Program. The choice of the Bell V280 Valor for the U.S. Army’s Future Long-Range Assault Aircraft (FLRAA) Program is a clear evidence that there is a growing acceptance of the operational advantages offered by tiltrotor technology. Indeed Leonardo sees also growing interest for the AW609 also in the government market, including the Italian one 🇮🇹



# VOLARE AIRSHOW

MEET THE AVIATION AND AEROSPACE INDUSTRY LEADERS  
AND DISCOVER THE LATEST DEVELOPMENTS AND INNOVATIONS



Aviation - Aerospace Convention & Exhibition

3 - 6 October 2024

Reggio Emilia Airport-LIDE, Italy

[www.volareairshow.com](http://www.volareairshow.com)

For more information :  
[info@airexpo.aero](mailto:info@airexpo.aero)



## WAI Gathered Women Aviation Professionals in Istanbul

Women in Aviation International (WAI) Turkey event was hosted by Boeing with the participation of stakeholders from the Turkish aviation industry in Istanbul. Ayşem Sargın, General Manager of Boeing Turkey and Central Asia, delivered the opening speech at the event where many women executives and professionals from the Turkish aviation industry celebrated International Women's Day together.

In two separate panels titled "Leading Women in Aviation - WAI Turkey Founding Members" and "Women Carrying the Flag in the Air", leading women from different stakeholders of the Turkish aviation industry such as Turkish airline companies, aircraft and engine manufacturers, industry organisations and universities shared their experiences and discussed the importance of women's employment for the future of Turkish aviation and WAI Turkey's contribution to the sustainable growth of the industry through its activities in this field.

Ayşem Sargın, General Manager of Boeing Turkey and Central Asia, said: "We believe that diversity and inclusion are critical to driving innovation and progress. We continue our efforts to increase the participation of women in the aviation industry. We believe that having more women in the talent pool of the aviation industry is



Ayşem Sargın, Ayşe Akalın, Güliz Öztürk

critical for the future of the industry. Today, we see that women's employment in the aviation industry is far from where it should be both in the world and in Turkey. As Boeing, we continue to reach thousands of young women and girls and guide them towards aviation through the activities we carry out with our partners from the Turkish aviation ecosystem. Through WAI Turkey, which we are launching today, we wish to unite and grow the efforts of stakeholders in the industry under a single roof and contribute to our country's rapid achievement

of the 50 percent female employment target set by the International Civil Aviation Organisation (ICAO)."

WAI, which started its activities in the USA in 1990 and completed its official establishment in 1994, is a non-profit organisation that carries out activities to increase the number of women in all working areas of the aerospace industry.

As the largest organisation in this field, WAI has more than 17,000 active members worldwide, including over 400 companies and

organisations, as well as industry professionals, aviation enthusiasts and university students.

WAI invests in the current and future workforce in order to contribute to building an inclusive, sustainable aerospace industry worldwide and to encourage women and girls to pursue a career in this sector. In this context, WAI supports its members through trainings, workshops, scholarship and mentoring programmes, as well as providing career opportunities by bringing them together with industry professionals.



WAI Türkiye Founding Members : Güliz Öztürk, CEO of Pegasus Airlines; Özlem Salihoğlu, SVP International Relations and Alliances of Turkish Airlines; Ayşem Sargın, Managing Director of Boeing Türkiye & Central Asia; Dr. Aybike Molbay, Turkish Technology Center General Manager, GE Aerospace; Prof. Hülya Cebeci, Director of ITU Aerospace Research Center; Serap Zuvın, Partner of Çakmak Attorneys at Law



# Sunexpress Added 28 New Routes for Summer 2024

SunExpress, the joint venture of Turkish Airlines and Lufthansa, achieved a revenue of EUR 1.8 billion in 2023, up 21% from the previous year. The airline also maintained its load factor at the high level of 85%. SunExpress will reach the largest network in its history this summer adding 28 new routes.

Max Kownatzki, CEO of SunExpress said, "Türkiye remains at the top of travelers' minds. The high demand we saw in 2023 is also reflected in the booking figures for the current year. Türkiye scores with its excellent value for money and diverse experiences it offers to travelers. Therefore, we have further expanded our direct connections to Türkiye. The tourism market is geared for growth and as Türkiye's tourism ambassador, we intend to do our share in this."

SunExpress is set to add 28 new routes to its flight network in the 2024 summer season and increase its seat capacity by 19%. The carrier will be offering more than 200 routes across 35 countries.

The leisure airline will also offer 18 new routes to the Turkish Riviera operating flights from Antalya, Izmir, Dalaman, and Bodrum-Milas airports to 67 destinations.



Tuncay Eminoğlu & Max Kownatzki

In addition, 10 new international routes will be added to its Anatolia - Europe flight network, offering direct services from 15 Anatolian cities to 18 cities in Europe and 3 cities in the Middle East. "We continue to bring individual with Turkish roots and family ties living in Europe to their home and reunite them with their loved ones. We will continue to support the local tourism of Anatolian cities as well" Kownatzki added.

SunExpress broke its own record with 12.6 million passengers in 2023. The carrier expects to welcome more than 15 million passengers by the end of the year.

Stating that they are committed to making Türkiye a year-round destination, Kownatzki said, "We are eager to help Türkiye reach its target of 60 million tourists this year.

We are working together with the Turkish Tourism Promotion and Development Agency to promote Türkiye abroad and to highlight Türkiye as a destination that combines adventure, sports, relaxation, history and cultural sights, appealing to a wide audience of travel enthusiasts."

Every other visitor from Germany to Türkiye in 2023 flew on SunExpress

SunExpress carried more than 50% of visitors traveling from Germany to Türkiye in 2023. Türkiye welcomed 6.2 million visitors from Germany last year, making Germany the second largest source market for Turkish tourism.

In line with its growth strategy, SunExpress plans to recruit nearly 1300 employees by the end of 2025, including cockpit, cabin, line maintenance, ground operations and head office positions.

Last year, SunExpress placed the largest aircraft order in the company's history. The airline currently operates 77 Boeing 737s and will increase the number of aircraft in its fleet to 166 by 2035.

The new orders represent SunExpress' ambition to respond to the increasing demand for Türkiye and supporting Türkiye's tourism. "We have once again proven that we are a key partner for Turkish tourism with our flights between Türkiye and Europe. Our planned growth is a reflection of our commitment to Türkiye's tourism" said Kownatzki.

Destinations;

Antalya to Graz, Sarajevo, Leeds/Bradford, Milan-Malpensa, London-Stansted, Kuwait, Bucharest-Otopeni, Cairo

Dalaman to Edinburg, Vienna, Nuremberg

Izmir to Sarajevo, Warsaw, Pristina, Madrid, Tirana, Rome-Fiumicino, Prague

Anatolia; Trabzon to Kuwait, Gaziantep to London/Stansted, Samsun to Munich, Adana to London/Stansted, Malatya to Frankfurt, Malatya to Dusseldorf, Kayseri to Berlin, Diyarbakir to Berlin,

Gaziantep to Munich, Samsun to Cologne/Bonn





# Emel Elik Bezaroglu: "We Set Out to Reach 50 Hotels by 2030"

**Şebnem Akalın:** First of all, thank you for your time. Could you tell us a little bit about yourself and the history of your hotels?

**Emel Elik Bezaroglu:** I am the Board Member Responsible for Sales and Marketing at Elite World Hotels. For 23 years, I have been working in Elite World Resorts & Hotels, mainly in the sales and marketing departments, and for the last ten years, I have also been responsible as a Board Member in our chain.

The Elite World brand was born in 2002 with our hotel in the Taksim Talimhane area, which we serve today under the name Elite World Comfy Istanbul Taksim. However, our family's hotel business history dates back to 1976 when we opened the Tahran Hotel in Van. Today, as Elite World with eight brands, 11 hotels, and a nearly 5,000-bed capacity, we bring Turkish hospitality together with guests from all over the world. Five of our hotels are in Istanbul, Van, Sapanca, Marmaris, Samsun, Samsun, and finally, Kuşadası, which we will open in June this year.

Our goal is to become a chain located in 7 regions of Turkey.

**Şebnem Akalın:** The damage caused by the pandemic in aviation was remedied very quickly, and the number of passengers started to increase compared to the years before the pandemic. We assumed that these passengers had accommodation needs in the countries they went to, and we thought that the tourism sector recovered at the same speed. However, as far as we understand, this has not been the case; illegal

stays have caused the industry to take a slight blow. What would you like to say about this issue?

**Emel Elik Bezaroglu:** As Elite World, we completed 2023 in line with our targets. However, we can say that these figures are not parallel to the increased tourist traffic after the pandemic and the increase in tourists coming to our country. In 2023, although the number of foreign visitors to our country increased by 11 percent, hotel occupancy rates, especially in metropolitan cities such as Istanbul, decreased

compared to the previous year. Renting houses for tourism purposes was effective, and tourism operators suffered from this situation. If this situation had not occurred, we could have broken a record in 2023 with higher occupancy and profitability rates.

However, we hope that with the "Regulation of the Activities for the Renting of Houses for Tourism Purposes," revised and entered into force as of 1 January 2024, inspections and regulations will be more controlled, and this situation will be overcome.



## TRAVEL & HOTELS

**Şebnem Akalın:** You have recently introduced a new hotel management concept for Turkey and started to open hotels with different concepts under your own name. And can you explain briefly what kind of diversity this difference will offer your guests?

**Emel Elik Bezaroğlu:** Trends in tourism are changing very rapidly. We make our plans in line with these trends, develop new products to meet the needs, and invest in these areas.

Until 2024, we responded to these demands with our four brands, Elite World Grand, Elite World, Elite World Comfy, and Elite World GO, in different segments such as economy, medium, upper, and luxury. As of this year, we have added four new brands, Elite World Collection, Elite World NEST, Elite World INN, and Elite World Residence, to offer a much wider choice of accommodation to guest groups in different segments in line with these changing trends. Today, we continue on our way with eight brands that appeal to new trends and different types of tourism, and we serve with accommodation types that appeal to all areas of tourism.

**Şebnem Akalın:** In the upcoming period, in



**which cities can we see Elite World hotels with new projects?**

**Emel Elik Bezaroğlu:** As Elite World Hotels & Resorts, we set out to reach 50 hotels by 2030 within the scope of our growth strategy with the franchise business model. In this context, with the strategy of "diversifying tourism," which is one of the most important needs of our country's tourism, we come together with tourism investors from all over Turkey who want to step into the field

of tourism or who are already in the sector and want to bring their brand together under the roof of a reliable and quality brand. We aim to contribute to the revival of tourism by bringing quality accommodation facilities to every corner of our country, not just big cities or tourist centers. In this context, we will open our Elite World Kuşadası hotel in Kuşadası in June, which will serve for 12 months in the marina area, the most touristic area of the region. With the demand from tourism investors,

we will continue our efforts to reach 50 hotels in 7 regions of Turkey.

**Şebnem Akalın:** Apart from your domestic hotels, do you have plans to expand abroad in the coming period?

**Emel Elik Bezaroğlu:** Within the scope of our growth strategy with the franchise model, we primarily aim to bring potential centers all over Turkey together with quality accommodation facilities. In the next stage of our strategy, we are planning a process in





place in the world league in tourism, is to protect them with sustainable policies. For this reason, "sustainability" is among our priorities as a chain. In this context, we are doing our part. We follow a serious policy on water consumption and waste management. For example, in terms of water consumption, we have achieved the target of reducing the average consumption of 1.27 m3 per room in 2022 to 1.23 m3 this year.

Regarding waste management, we classify our waste according to the legal regulations, store it in our Zero Waste room, and carry out the processes with the relevant municipalities. We also focus on the social, cultural, and community sides of sustainability and support women producers with the products used in our hotels. We will

continue to contribute to social and environmental responsibility by producing more sustainability and social responsibility projects in 2024.

**Şebnem Akalın:** We know that you are a member of the Board of Directors of Elite World Hotels & Resorts as well as a member of the Board of Directors of the Turkish Tourism Promotion and Development Agency (TGA) and a member of the Board of Directors of the Eastern Anatolia Region. Could you tell us a little bit about TGA?

**Emel Elik Bezaroğlu:** Apart from my duties at Elite World Hotels & Resorts, I also contribute to the Turkish Tourism Promotion and Development Agency (TGA) under the Ministry of Tourism as a Board Member for the Eastern Anatolia Region. Within TGA, efforts are being

which we can evaluate and decide on investor requests from abroad.

protecting our existing natural beauties, which contribute to our country's

**Şebnem Akalın:** In recent years, due to the rapid depletion of natural resources, the concept of sustainability has come to the fore in all sectors, but especially in the tourism sector. How are naturalization and sustainability handled in your hotels, and what are your future plans?

**Emel Elik Bezaroğlu:** Sustainable tourism is among the priorities of tourism today. The most basic method of



## TRAVEL & HOTELS



made to increase market and tourist diversity in tourism in our country, where each city has tourism potential. TGA closely follows tourism trends and serves with a fast, active, and dynamic team of tourism volunteers to determine policies and act in parallel with these trends. In order to contribute to Turkey's positioning in the international market, TGA works to increase the number and profitability of tourists coming to our country, facilitate the implementation of potential investment projects for the tourism sector, and contribute to the development of cities. In this context, studies on areas such as sustainable tourism and destination branding are carried out meticulously.

**Şebnem Akalın:**  
As a successful businesswoman, what would you like to say about your vision and your work to ensure more female managers in your

sector and gender balance in the sector?

**Emel Elik Bezaroğlu:**  
The tourism sector is one of the sectors that contribute the most to the economy of our country



Emel Elik Bezaroğlu & Şebnem Akalın

among the service sectors. It represents a very dynamic area such as hospitality, setting trends, and taking quick action. Increasing the representation of female managers and colleagues in determining policies for these dynamics in the tourism sector is among our priorities. We have many female employees and managers within our chain. We contribute to the development of our female employees and managers and implement policies to support their career planning. In addition, we support strategies to increase the ratio of female employees throughout the tourism sector. I believe that the tourism sector, where women have a greater voice, will play an important role in the development of our country.

**Şebnem Akalın:**  
Finally, is there a message you would like to convey to our readers?

**Emel Elik Bezaroğlu:**  
We plan to spend 2024 focusing on our growth targets as Elite World Resorts & Hotels. In 2023, we hope to exceed our targets this year and close the year with higher occupancy rates and profitability. We hope 2024 will be a year for our country's tourism to achieve leadership in the World Tourism League 🌍



# Top 10 Busiest Airports in the World

Airports Council International (ACI) World has unveiled the highly anticipated preliminary top 10 busiest airports worldwide for 2023, showcasing significant shifts driven by the resurgence of international air travel.

The global total passenger forecast for 2023 stands close to 8.5 billion, reflecting a remarkable recovery of 93.8% from pre-pandemic levels. Notably, international traffic recovery drew nearer to that of domestic traffic, emphasizing its essential role in propelling the industry's resurgence and expansion.

The influx of passengers at international airports has been central in bolstering the recovery of hubs reliant on this segment,

consequently influencing the composition of the top 10 busiest airports for total passengers.

ACI World Director General Luis Felipe de Oliveira said, "Global air travel in 2023 was chiefly fuelled by the international segment, propelled by several factors. Among these were the anticipated benefits from China's reopening and a growing inclination towards travel despite macroeconomic conditions. While perennial leaders from the US continue to dominate the top 10 busiest airports for passengers, notably Hartsfield-Jackson Atlanta International Airport retaining its number one position, there are notable shifts. Dubai International Airport jumped to second rank for

the first time, while Tokyo Haneda International Airport witnessed a remarkable ascent from 16th position in 2022 to 5th in 2023. Additionally, the unwavering strength of Istanbul and New Delhi airports keep them in top ranks, marking significant progress over 2019.

"Notably, cargo continues to play a key role in world commerce despite the year-over-year decrease. Hong Kong International Airport has maintained the top position, followed by Memphis International Airport and Shanghai Pudong International Airport. Doha International Airport rejoins the top 10, jumping to number 8 with a growth of 6.3% over 2019.

"The rankings highlight the crucial role these

transportation hubs play in global connectivity, commerce, and economic development. Airports continue to demonstrate their resilience and adaptability amidst the challenges posed by the ever-evolving landscape of global travel. ACI World remains dedicated to advocating for airports worldwide throughout pivotal stages of policy formulation and to advancing the pursuit of airport excellence."

Airport rankings are based on data gathered from over 2,600 airports across more than 180 countries and territories globally. This vast dataset places ACI World in a distinctive position as the foremost authority on airport travel demand, ensuring the utmost accuracy and reliability in its rankings.

## PASSENGERS\*

2023	2022	2019	AIRPORT	2023	% CHANGE VS 2022	% CHANGE VS 2019
1	1	1	ATLANTA, USA (ATL)	104 653 451	11.7	-5.3
2	5	4	DUBAI, UAE (DXB)	86 994 365	31.7	0.7
3	2	10	DALLAS/FORT WORTH, USA (DFW)	81 755 538	11.4	8.9
4	8	7	LONDON, UK (LHR)	79 183 364	28.5	-2.1
5	16	5	TOKYO, JAPAN (HND)	78 719 302	55.1	-7.9
6	3	16	DENVER, USA (DEN)	77 837 917	12.3	12.8
7	7	28	ISTANBUL, TURKEY (IST)	76 027 321	18.3	45.7
8	6	3	LOS ANGELES, USA (LAX)	75 050 875	13.8	-14.8
9	4	6	CHICAGO, USA (ORD)	73 894 226	8.1	-12.7
10	9	17	NEW DELHI, INDIA (DEL)	72 214 841	21.4	5.4

\* Total passengers enplaned and deplaned, passengers in transit counted once

# Insights from German Fighter Pilot Captain Oswald Boelcke's Diaries: A Visit to Türkiye in 1916



by Dr. Emir Öngüner  
Freelance Researcher in  
Aviation History

As part of the German Military Mission initiated in 1913, numerous German officers and sergeants were deployed to serve in the Ottoman army. Despite their service alongside Turkish forces in land, naval, and air units, there are unfortunately few written records of their experiences in Türkiye. Memoirs penned by officers such as Otto Liman von Sanders, Friedrich Kreß von Kressenstein, Hans von Kiesling, Erich Serno, and Hans-Joachim Buddecke, who spent extended periods in Türkiye, serve as invaluable sources frequently referenced in Turkish historiography of World War I.

It is also possible to encounter German officers who served as observers in Türkiye for short periods. Among them was Oswald Boelcke (1891-1916), known for his 'Dicta Boelcke' theory, which consists of eight principles, and his distinguished service as a pilot in the German army, where he shot down 40 enemy planes before his death. Although his visit lasted only two weeks, traces of Boelcke's time in Türkiye



Oswald Boelcke (1891-1916) and his "Field Reports"

can be found in his diaries titled 'Feldberichte' (pp. 95-104), published after his death in 1917.

Between July 14 and August 1, 1916, Boelcke visited Istanbul, Çanakkale, and Izmir. It is evident from his writings that he did not participate in any combat missions during this period. Instead, his trip was primarily for inspection, propaganda, and vacation purposes. Boelcke described his visit to Türkiye as follows (Some abbreviations have been made in the translated version):

## July 14, 1916:

Traveling to Türkiye. We passed through Edirne.

Region: Highlands, little settlement, no trees, occasional villages, but very few and small, individually placed low houses mostly thatched, mostly thatched, individually placed low houses. Parts of the region are covered with bushes. Most of the area is uncultivated, with only a few small corn fields.

Railroad: Single-track, few crossings. War makes rail traffic very difficult. Long delays at stations.

"People are poorly dressed, adorned with colorful belly bands and stunning headdresses. It's fasting time, which I believe has a significant impact on everyone. Women are also working, always wearing scarves. During our journey, we encountered a military transport vehicle. The men looked strong with tanned skin, and all their equipment seemed to be of German origin.

There was once large-scale agriculture on the shore. I saw a camel caravan grazing in a bay for the first-time and then the sea itself.



There are two cannons set up against the balloons and the swimmers that shine in all colors on the shore.

St. Stefano (Yesilkoy) feels like an eastern town. I saw charming little European-style houses along the beach. It's like the Johannisthal area in Berlin. There is a radio station. Then comes Constantinople. You can't see the railroad when coming by car. The view from the car is less picturesque; old, dirt houses, but one can easily fly over them.

I was picked up at the train station by some German airmen and taken to a hotel. Later in the evening, I met with officers from the German War Ministry as well as some other gentlemen.

**July 15, 1916:**

We headed to the headquarters early in the day. There, I reported to Enver Pasha, who personally awarded me the War Medal. Still relatively young, Enver left a charming and energetic impression. Afterwards, accompanied by an interpreter, I visited the bazaar, a labyrinth of small streets, alleyways, and corridors selling everything imaginable. We then proceeded to Hagia Sophia, the largest mosque, and Sultanahmet, which had been converted into a barracks.

In the afternoon, we visited the 'General,' the ship where the German naval officers resided. Later in the evening, we went to Petit Champ, a



Boelcke's visit to the airfield at Yesilköy (Hauptmann Boelckes Feldberichte, 1917)

garden venue where German music was played.

**July 16, 1916:**

In the morning, I boarded the 'General' to inspect a submarine with Lieutenant H. At noon, a Greek body passed by the hotel. The coffin lid was carried in front, exposing the body.

In the afternoon, I strolled around Galata and saw the Sultan coming out of the mosque. First, the gendarmes on horseback, followed by the bodyguards on horseback, then the aides, and finally the Sultan arriving in a carriage drawn by four horses, with the same entourage departing in reverse order.

**July 17, 1916:**

I was witness some flights before the afternoon. We drove through Constantinople, passing

by the old Byzantine walls, ancient cemeteries, and some barracks. Then, we went through the wasteland to St. Stefano, where we visited the air station. Major S. had managed to create a fleet out of nothing, given the difficulty in obtaining supplies in the current situation.

At noon, I was a guest of the navy aboard the 'General.' In the afternoon, accompanied by Captain D. and other gentlemen, we crossed the Bosphorus to Tarabya, where the Embassy garden beautifully housed the German cemetery of honor. Later, we visited a shoe factory in Beykoz before heading to the 'Goeben' and 'Breslau' ships. After a brief tour of both ships and dinner, I enjoyed a delightful evening concert on deck. As I departed, Captain A., the commander of the Goeben,

offered me a hearty cheer.

**July 18, 1916:**

Today, I traveled by motorboat on the Sea of Marmara with a Turkish adjutant of S.'s. We set off for Uskudar and then crossed to the Princes' Islands, eventually arriving at Büyükkada. Büyükkada is akin to Berlin's Grunewald or Wannsee for the people of Constantinople—a mountainous, pine-covered island nestled in the sea, where many wealthy people had their summer residences. On Saturdays and Sundays, it's a popular destination for residents of Constantinople. We enjoyed coffee in the garden of the military mess, overlooking the sea and neighboring islands. In the evening, after visiting nearby islands (one of which houses the captured defender of Küt'ul-Amâre in a beautiful villa), we returned home.



Buddecke, von Sanders, and Boelcke on the Gallipoli front (Bundesarchiv, Bild 183-S60853)

### July 19, 1916:

We set sail for Bandırma at 9:00 a.m. The Sea of Marmara was calm. Aside from a few officers, the ship was mainly populated by rural folk, including women. After spending some time in Bandırma, a town characterized by its predominantly wooden houses nestled on a mountainside with a harbor, we continued our journey by train (arranged especially for us). The trip to Lake Manyas had a somewhat gloomy atmosphere, with only a few fishing boats on the lake and numerous storks along the way. As we traveled through the Susurluk Valley, the landscape gradually transformed: more villages, well-cultivated pastures, fruit trees, and large herds of oxen and sheep came into view. Next to the

railroad, there was a well-maintained road bordered by forest-like formations on the slopes. After a pleasant dinner, we slept well.

### July 20, 1916:

I woke up south of Akhisar. The area is incredibly scenic, with fertile, well-cultivated land. I spotted numerous herds and camel caravans led by donkeys. The plain becomes increasingly lush as we continue our journey. Izmir is beautifully nestled on the slope of a hill.

Buddecke was at the train station with some gentlemen. I stayed at the Hotel Krämer on the seafront; from my balcony, I had a sweeping view of the entire Gulf of Smyrna. In the afternoon, after reporting to His Excellency Liman von Sanders, I visited the bazaar, which is not as large as the one in Istanbul.

### July 21, 1916:

At 10 a.m., we headed to Seydiköy airport, located south of Izmir. The airmen are accommodated in a school nearby, with a division camped close to the airfield. The Turkish soldiers left a positive impression.

### July 22, 1916:

In the morning, we went swimming to Karşıyaka with some men and women. Buddecke picked us up there on a yacht, and it was a wonderful trip. The view of the surrounding mountains and Izmir from the bay was stunning.

### July 23, 1916:

In the morning, we swam in Karşıyaka again and took some photos there.

### July 24, 1916:

We slept in late, and in the afternoon, some gentlemen

and I went on a sailing trip to the area where the planned seaplane station is located.

### July 25, 1916:

In the morning, I explored the more remote areas of Izmir alone, where the scenery is much more 'oriental.' Now, I have to take the longer route to the Gallipoli via Bandırma-Istanbul. It's disheartening to lose eight days. I could reach there in two and a half hours by plane, but Buddecke refuses to provide one. He offers a thousand reasons against it; I suspect he's following orders.

### July 30, 1916:

At 10 a.m. on July 28, I embarked on a journey to the Dardanelles aboard a small gunboat. Gallipoli is a small provincial town with large barracks, some of them slightly out of the way. Some houses along the beach had been hit. By noon, we reached the town and reported to Merten Pasha. In the afternoon, I visited the airfield and took a flight over Troy-Kum Kulesi-Seddülbahir to the old British position. The flight offered stunning views, with the islands of Imbros, Bozcaada, and especially Samothrace rising beautifully from the sea. From above, British ships anchored in the Kophalo Bay of Imbros were clearly visible. Near Thalaka, a sunken Turkish cruiser and a British submarine partly remained on their sides above the waterline, while



several steamers and an old French ship had run aground on the beach at Seddülbahir. The barren hilly peninsula was starkly visible. At Kilitbahir, there were large Turkish military camps.

### **July 31, 1916:**

We traveled to Seddülbahir on a small steamer, arriving early to explore all the positions on the other side of the peninsula with a naval officer as our guide. The contrast between the Turkish and British positions was striking; the British possessed much more and better equipment. Later, I took a glance at the British landing grounds, where they had intentionally run a few steamers aground for protection. Following a quick breakfast, I flew to M. and D., and then returned to St. Stefano in the afternoon along the north coast of the Sea of Marmara.

Today marked the celebration of Ramadan Eid. Flags adorned the streets as I witnessed lively music, rhythmic drumming, bustling crowds, the sale of crescent flowers, and parades featuring flags and songs.

### **August 1, 1916:**

After a short stop at the Ministry of War and a stroll through the bazaar, I departed from Istanbul. Enver Pasha happened to be on the same train. He instructed his adjutant to escort me to the lounge car for tea. He was quite talkative and canlı during our conversation, which was conducted mostly in German.

On August 1, Boelcke departed for Sofia aboard a Balkan train. After undertaking similar activities in this country, he returned to Berlin. His new assignment involved training German pilots and participating in active combat on the western front. Tragically, on October 28, 1916, during a dogfight in France, his plane collided with that of German pilot Erwin Böhne's, resulting in Boelcke's death at the age of 25 🌐

## Honeywell to Acquire Civitanavi Systems to Strengthen Autonomous Operations Offerings in Aerospace and Expand European Footprint

Honeywell announced the intention to acquire the entire share capital of Civitanavi Systems S.p.A. (Civitanavi or the Company). Honeywell will initiate a voluntary tender offer to acquire all outstanding shares of Civitanavi for a purchase price of €6.30 per share in cash (an equity value of approximately €200 million at closing).

The acquisition will further strengthen Honeywell's capabilities to help its customers create autonomous operations in aircraft and other vehicles. It also supports Honeywell's alignment of its portfolio around three compelling megatrends, including the future of aviation and automation. Together with Civitanavi, Honeywell will be able to offer a broader set of technologies to its customers across the globe, whether they are traditional operators seeking to increase the autonomous capability of their existing fleets or are new entrants in the Advanced Air Mobility space.

The purchase price payable at closing represents a premium of approximately 27.1% to the 30-day volume-weighted average trading price of Civitanavi's stock ended on March 26, 2024, the last day of trading before the announcement of the transaction. Honeywell has already secured the commitment of Civitanavi's controlling shareholder, which owns approximately 66% of Civitanavi's outstanding shares to tender its shares.

The transaction is not subject to any financing condition and is expected to close in the third quarter of 2024, subject to customary closing conditions, including among the others: (i) receipt of required antitrust clearance; (ii) receipt of required clearances pursuant to the foreign direct investment regulations in Italy, United Kingdom and Canada

and; (iii) the tender of at least 95% of Civitanavi's outstanding shares.

Civitanavi is a leader in position navigation and timing technology for the aerospace, defense and industrial markets. Both Civitanavi and Honeywell have a successful history of developing innovative inertial navigation solutions, which can track the position and orientation of a vehicle by using accelerometers, sensors and gyroscopes. Civitanavi's product offerings of inertial navigation, geo reference and stabilization systems will complement technologies in Honeywell's existing navigation and sensors business. Civitanavi specializes in high-performance Fiber Optic Gyro technology that Honeywell has not previously offered in its navigation portfolio.

"By integrating Civitanavi's inertial technologies and sensors across Honeywell's existing commercial, military, space and industrial platforms, our customers across the globe will now have access to a more robust portfolio of aerospace navigation solutions in support of their journey toward autonomous operations," said Honeywell Aerospace Technologies President & CEO Jim Currier.

"With this acquisition, we will be able to immediately expand our offerings to customers in the European Union through Civitanavi's navigation solutions, a capability we intend to further build out in the near-term. We look forward to adding this critical technology to our portfolio to help accelerate the growth of our Aerospace business. We are excited to welcome Civitanavi's talented workforce as our newest Honeywell Futureshapers," Currier added.

# TAV's Four Airports to Receive Service Quality Awards

The airports operated by TAV Airports, a member of Groupe ADP, including Izmir Adnan Menderes, Milas-Bodrum, Skopje, and Zagreb airports, received recognition through the "Airport Service Quality" (ASQ) program.

Izmir Adnan Menderes, Skopje, and Milas-Bodrum airports were selected as "Best Airport in Europe" in their respective categories based on passenger capacities. Izmir Adnan Menderes also received an award in the category of "Easiest Airport Journey in Europe," which evaluates airport transit convenience performance. Additionally, Izmir Adnan Menderes was recognized in the categories of "Cleanest Airport in Europe," "Most Enjoyable Airport in Europe," and "Airport with the Most Dedicated Staff in Europe,"



making it one of nine airports awarded in a total of five categories from all regions. Zagreb Airport, with its award in the category of "Easiest Airport Journey in Europe" secured its place among eight airports listed in the ACI World Director General's Roll of Excellence, a recognition given to airports that have won multiple ASQ awards over a five-year period in the last 10 years.

TAV Airports COO Kürşad Koçak stated, "As TAV Airports, we operate 15

airports in eight countries, dedicated to delivering the best travel experience by closely attending to the needs and expectations of passengers. Last year, we served to a total of 96 million passengers across our airports. It brings us great joy to announce that four of our airports have been acknowledged among the world's best airports for their exceptional customer experience quality, as determined by direct evaluations from

passengers across various categories. With our skilled workforce and wealth of knowledge, we have established ourselves as a preferred brand in airport management globally. I extend my pride to all our employees whose efforts have contributed to this remarkable achievement."

The Airport Service Quality (ASQ) program, created by the Airports Council International (ACI World), provides tools to measure and enhance passenger satisfaction, operational performance, and airport service quality. Initiated in 2006, ASQ is recognized as the leading global airport passenger satisfaction program, with over 400 participating airports in 109 countries. ASQ winners are determined based on direct evaluations from 595,000 passengers worldwide.

## Gulfstream G700 Surpasses 50 City-Pair Speed Records

The G700 achieved its 50th speed record on a carbon-neutral flight connecting Los Angeles to Nice, France, traveling 5,197 nautical miles/9,625 kilometers in 10 hours and 13 minutes at an average speed of Mach 0.90. The industry-leading aircraft then set its 51st speed record — also a carbon-neutral flight — from Nice to Singapore, making the 5,754 nm/ 10,656 km trip in just 11 hours and 30 minutes at

an average speed of Mach 0.90.

The latest record-breaking flights are a fast follow to a city-pair record set by the award-winning G700 on a trip from Tokyo to Savannah in December 2023. The new ultralarge-cabin aircraft made the 6,365-nm/11,788-km journey in 10 hours and 53 minutes at an average speed of Mach 0.91.

"These latest records once again prove that the G700

can help our customers reach their destinations faster," said Mark Burns, president, Gulfstream. "We are excited to return to the Singapore Airshow as we continue to see impressive business growth in the Asia-Pacific region. Demand for Gulfstream's high-performance capabilities has never been greater, and we look forward to showcasing our next-generation aircraft, which lead the industry in

innovation, performance and cabin comfort."

The G700 features the most spacious cabin in business aviation and has higher than originally announced performance with a maximum range of 7,750 nm/14,353 km at Mach 0.85 and 6,650 nm/12,316 km at Mach 0.90 as well as a maximum operating speed of Mach 0.935, making it the fastest aircraft in the Gulfstream fleet.

# Turkish Airlines Launches its Digital Product "TK Wallet"

Miles&Smiles members can complete payment and refund processes quickly and easily with TK Wallet.

Turkish Airlines, the airline flying to the more countries than any other in the world, has added a new service to its digital offerings for passengers by launching the TK Wallet application.

Turkish Airlines Chief Commercial Officer Ahmet Olmuştur stated: "In line with our digitalization goals, we continuously improve ourselves to implement applications that will facilitate our passengers' travels. We are working to make our services more accessible and continue to introduce innovations that will add comfort to our guests' travel experiences. We have added TK Wallet to our digital payment methods by incorporating it into our digital services used through the Turkish Airlines mobile application and website."

Flag carrier provides Miles&Smiles members the ability to make payments and refunds faster using TK Wallet. Turkish Airlines also offers an opportunity to earn TK Money on top of the refund amount for ticket and additional service purchases made through its mobile application and website.

TK Money earned through refund transactions via TK Wallet, which is offered in four different currencies (Turkish Lira, Euro, US dollar and British pound) through Turkish Airlines' online channels, can be used quickly and securely.



## The New Appointment at Airbus

Johan Pelissier was appointed President of Region Europe and Head of Commercial Europe for the Commercial Aircraft business from January 2024 onwards. Based in Toulouse, Johan is responsible for driving the company's growth by leveraging the company's presence, enhancing cross-business capabilities, and building localisation strategies across 50+ European countries. He is also responsible for the sales for the Commercial Aircraft business in Europe.

With more than 25 years sales and marketing experience, Johan held various leadership roles within Thales and Airbus that he joined 13 years ago, in Southeast Asia (SEA) and in the Asia Pacific region. Prior to his current position, Johan was the Head of the Asia Pacific region, including India and South Asia, for the Airbus Defence and Space division from 2019 till 2023. He graduated from the Ecole Nationale Supérieure de Télécommunications de Bretagne.





## Behind the Scenes with Singapore Airlines

Singapore Airlines hosted Eskişehir Technical University students to offer them the opportunity to see behind the scenes of the aviation industry. Students had the opportunity to witness every stage of Singapore Airlines operations, from the arrival of the aircraft at the airport to baggage handling, check-in procedures, boarding process and a special visit to the A350-900 aircraft.

The day started with the students observing the arrival of the Singapore Airlines aircraft, and then the students observed first-hand the process from the moment the baggage was disembarked from the aircraft to the moment it was placed on the baggage belt. They then had a comprehensive briefing with the airport staff and learnt about the meticulous coordination

required for a smooth airport operation.

Students learnt about check-in procedures and the intricacies of passenger services with Singapore Airlines. Before boarding the aircraft, they explored the state-of-the-art A350-900 aircraft and examined the features of the state-of-the-art technology product that defines Singapore Airlines'

commitment to passenger comfort and technological innovation.

One of the highlights of the day was the distribution of certificates to the students, signifying their active participation and commitment to the aviation experience organised by Singapore Airlines. This not only symbolised their participation, but also

signalled Singapore Airlines' commitment to contribute to the education of young talents interested in the aviation industry.

Singapore Airlines Turkey General Manager Hongyao Hu expressed Singapore Airlines' strong belief in the future of aviation in Turkey. He emphasised the importance of supporting and encouraging young aviation enthusiasts in the country. Hongyao Hu said, "Witnessing the enthusiasm and determination of these students once again vindicates our commitment to contribute to the development of aviation talent in Turkey. We see a promising future for the industry here and are honoured to play a role in nurturing the next generation of aviation professionals."



# Nigar Şeyda Yılmaz Elected as the President of the Communication Forum of Airports Council International ACI Europe

Continuing to increase its effectiveness as a global hub and leading the aviation industry, İGA İstanbul Airport continues to represent Turkey in the international arena. Nigar Şeyda Yılmaz, Deputy Corporate Communications Manager of İGA İstanbul Airport, was elected as the President of the Communication Forum of Airports Council International ACI Europe.

Nigar Şeyda Yılmaz, Deputy Corporate Communications Manager of İGA İstanbul Airport, was elected as the President of ACI Europe Communications Forum (Communications Forum of Airports Council Europe International), which is organised by the representatives of the corporate communications departments of European airports to evaluate the changes in the rapidly developing communications sector, share know-how and prepare for innovations and crises in airport operations.

Yılmaz, who has been the Vice President of ACI Europe Communication Forum since 2020, took over the Presidency from Athens Eleftherios Venizelos



International Airport at the 22nd ACI EUROPE Communication Forum Meeting held at Franz Josef Strauss Airport in Munich, Germany.

ACI Europe Communication Forum, established in 2013 with the gathering of the employees of the communication units of airports in Europe, addresses topics such as crisis communication,

PR, multimedia formats, interactive communication tools and social/digital media and facilitates the exchange of information between airports. The forum, which was established to contribute to ACI Europe's new communication tools adopted by airports, analysis and reporting on the passenger experience of airports, presents its annual work programme

to the ACI Europe Board of Directors, headquartered in Brussels, Belgium, in January every year.

The election of a representative from İGA İstanbul Airport to the Presidency of ACI Europe Communication Forum, which has more than 80 members, once again proves Turkey's success in airport communication and management in the international arena.



## Pegasus and TEV, Signed for 1,000 Female Students for University Scholarship

Pegasus Airlines, which decided to support the education of 1,000 female students in the 100th anniversary of the Republic by providing university scholarships in cooperation with the Turkish Education Foundation (TEV), officially launched the "Pegasus Every Step to the Future Scholarship Fund" project. Pegasus Airlines CEO Güliz Öztürk and TEV General Manager Banu Taşkın came together for the signing ceremony of the project at Pegasus Airlines Headquarters on Tuesday,

20 February 2024. Within the scope of the "Pegasus Every Step to the Future Scholarship Fund" project, 25% of the scholarships, which will start in the 2023-2024 academic year and continue until the students complete their university education, will be awarded to scholarship recipients from cities affected by the earthquake disaster in February 2023.

In addition to the scholarships provided within the scope of the "Pegasus Every Step to the Future Scholarship Fund",

scholarship recipients are also provided with additional opportunities such as mentoring support from Pegasus managers, internship opportunities within the company, introduction of different business areas in the aviation sector by Pegasus leaders, and participation in online/offline sessions and seminars held under the umbrella of women in aviation.

Speaking at the signing ceremony, Güliz Öztürk, CEO of Pegasus Airlines, said: "As Pegasus Airlines, we have been carrying out many activities for years with our belief in gender balance. Now, on the occasion of the

100th anniversary of our Republic, we are supporting the education of 1,000 female university students in cooperation with the Turkish Education Foundation. We are proud and happy to be the institution that supports the highest number of scholarship students at a single time in the history of TEV with this support, which means a great deal to us, knowing that our young girls will keep the Republic alive forever. In order to never lose the spirit of solidarity and to be able to support these regions after the earthquake disaster that struck our country in February 2023, we have decided that 25% of our scholarship recipients come from earthquake-affected



provinces. We will continue to support young people on their way to a bright future and work with all our strength for our country."

Drawing attention to the importance of equal opportunity in quality education, Banu Taşkın, General Manager of the Turkish Education Foundation (TEV), said: "It is of great importance to make quality education, which is the fundamental right of every individual, accessible to everyone regardless of gender. As the Turkish Education Foundation, we have been endeavouring to ensure that our young people benefit from equal opportunities in education with the activities we have been carrying out for 56 years, and we support our students in their educational journey.

We continue our efforts to create value in this field based on the principles of Quality Education and Gender Equality, which are sustainable development goals. In this journey, the contributions provided by valuable education-friendly organisations such as Pegasus Airlines are both an example for the society and a hope for the future. With the work we have implemented with Pegasus, we go beyond providing financial support to our female scholarship recipients and offer them multifaceted support that will inspire and guide them. These contributions are very valuable for our female students and disaster victims to realise their potential on the road to their dreams. We would like to extend our endless thanks to Pegasus Airlines for their support to 1,000 female university students who will be the bright face of our country in the 100th year of our Republic."

## NAC Collaborates with ATR and TotalEnergies to Offer the Equivalent of 6% SAF on NAC's ATR Delivery Flights

The initiative provides for a blend of 30% Sustainable Aviation Fuel (SAF) to be used for one out of five deliveries of new ATR aircraft to NAC, resulting in four tonnes of CO2 saved for every batch of five aircraft. This is equivalent to a 6% SAF blend on the first leg of each ferry flight from 2023 onwards.

AirSwift is the first airline to benefit from the programme, with a new ATR 72-600 from the NAC Skyline, which departed from Toulouse to the Philippines on 27 November 2023. AirSwift will use this aircraft to service its hub in El Nido on the island of Palawan.

The ATR 72-600 is the lowest emission regional aircraft on the market thanks to the high efficiency of the turboprop technology and ATR's continuous commitment to further reducing CO2 emissions and operating costs. The ATR 72-600 boasts a remarkable 45% reduction in CO2 emissions compared to similar-size regional jets. Already certified to fly with a 50% SAF blend, ATR is committed to achieving the 100% SAF readiness of its aircraft family by 2025.

The SAF is produced by TotalEnergies in its French facilities and made from waste and residues such as used cooking oils or animal fats. It is then blended with conventional Jet A-1 at a rate of 30%. Neat SAF could help reduce CO2 emissions by up to 90% compared to its fossil equivalent on its entire lifecycle.

Nathalie Tarnaud Laude, ATR's Chief Executive Officer, says: "This joint initiative from NAC and AirSwift demonstrates how much our customers

are demanding tangible solutions to reduce emissions. As a manufacturer, all our efforts in terms of technology and innovation are going in that direction, leveraging an already highly efficient platform. We were the first to fly a commercial aircraft with 100% SAF in both engines and we will continue pushing the whole ecosystem towards more SAF availability, convinced that sustainable fuels will play a critical role in the decarbonisation of air transport both in the short and long-term."

"We are proud to offer solutions that emit less CO2, such as SAF. Our mission is to support our customers in their energy transition. These deliveries are a new step forward for TotalEnergies, in line with our ambition to achieve carbon neutrality by 2050, together with the society" declares Joël Navaron, President of TotalEnergies Aviation.

Alfonso Reyes, CEO of AirSwift, says, "We are very pleased to partner with NAC and ATR for this new addition to our fleet, and especially that we will be the first customer in Southeast Asia to use SAF for our initial delivery flight. Ayala and AirSWIFT are fully committed to sustainability and to reducing our carbon emissions as we work towards our Net Zero 2050 goals. We are hopeful that greater investment in this space will create the momentum necessary for SAF to become more widely available on a commercial basis in the coming years."

Norman C.T. Liu, President & CEO of NAC, says, "This is an important step for NAC to manage our environmental impact. We are pleased to play a role in facilitating our customer's transition to SAF."



# Airbus Reports Strong 2023 Commercial Aircraft Orders and Deliveries in Complex Operating Environment

Airbus delivered 735 commercial aircraft to 87 customers around the world in 2023, demonstrating strong performance despite a complex operating environment. The Commercial Aircraft business registered 2,319 gross new orders (2,094 net). As a result, its 2023 year end backlog stood at 8,598 aircraft.

“2023 was a landmark year for Airbus’ Commercial Aircraft business with exceptional sales and deliveries on the upper end of our target,” said Guillaume Faury, Airbus CEO. “A number of factors came together to help us achieve our goals, including the increased flexibility and

capability of our global industrial system, as well as the strong demand from airlines to refresh their fleets with our most modern and fuel-efficient aircraft.” Guillaume added: “ This is a remarkable achievement. My thanks goes to our customers, supplier partners and all the Airbus teams who made it happen.”

“We originally anticipated aviation to recover sometime in the 2023-2025 timeframe, but what we saw in 2023 was, alongside the single-aisle market, widebody return much sooner than expected, and with vigour”, said Christian Scherer, Airbus’ newly appointed

CEO, Commercial Aircraft. “A big thumbs up to our commercial and regional teams, and importantly, a big thank you to our customers for their trust and partnership. We have never sold as many A320s or A350s in any given year, not to mention welcoming seven new customers for the A350-1000. Travel is

back and there is serious momentum!” Christian added: “I’m proud to say there are now 735 more fuel-efficient Airbus jets flying today, paving the way to our lower carbon future. It’s the orders we win today that will support us in investing in innovative and even more sustainable solutions tomorrow.”

## Full aircraft fleet deliveries for 2023

	2023	2022
A220 Family	68	53
A320 Family	571	516
A330 Family	32	32
A350 Family	64	60
<b>Total</b>	<b>735</b>	<b>661*</b>

\*After a reduction of two aircraft (2 A350-900 AEROFLOT) previously recorded as sold in December 2021 for which a transfer was not possible due to international sanctions against Russia.

# Turkish Airlines is Expanding its Collaboration with Vietnam Airlines

The signing ceremony was held at the Presidential Complex witnessing the attendance of Cevdet Yılmaz, Vice President of Türkiye and Pham Minh Chinh, Prime Minister of Vietnam. At the signing, Turkish Airlines was represented by Bilal Ekşi, Chief Executive Officer at Turkish Airlines; and Turhan Özen, Chief Cargo Officer at Turkish Airlines, while Vietnam Airlines was represented by Dang Ngoc Hoa, Chairman of the Board of Directors at Vietnam Airlines. The agreement is set to establish the foundation of a high-potential collaboration between the two airlines, aimed to be further strengthened in the future.

A subsidiary of Turkish Airlines, Turkish Cargo is meticulously assessing



collaboration opportunities in Asia, a continent of strategic importance and high potential. The cooperation, brought to life with Vietnam and its flag carrier Vietnam Airlines as part of the expansion activities of the successful air cargo brand, represents just one of these initiatives.

The airline collaboration, initiated by Türkiye, having shown a striking development momentum in the last 20 years, is anticipated to significantly

contribute to the commercial activities of both countries. Vietnam, with its growth rate surpassing regional peers and global averages, stands out in Asia, a continent of development and rise. Through the signing, Turkish Cargo reaffirms its role in shaping the future of air cargo transportation, particularly in connecting vital regions and fostering international trade and commerce.

Bilal Ekşi, CEO at Turkish

Airlines, commented at the signing ceremony: “Asia is one of our key markets at Turkish Airlines. Our efforts to increase our presence on this prominent continent continue unabated with our competent teams and R&D activities. In an era where global aviation is shifting from West to East, these efforts are even more meaningful. I am hoping our collaboration with Vietnam Airlines will be beneficial and fruitful for both countries and both flag carriers.”

Dang Ngoc Hoa, Chairman of the Board of Directors at Vietnam Airlines, stated: “The cooperation between Vietnam Airlines and Turkish Airlines was established on the basis of mutual benefit. Turkish Airlines will benefit from expanding the scale of its transportation

## INTEGRALE, the French Two-Seater Electric Aircraft!

The tarmac of Toulouse-Francazal airport hosted the power-on of the first prototype of INTEGRAL E, before the AURA AERO teams, investors, partners, customers and journalists, as well as many institutional representatives. The

event took place under the patronage of French navigator Louis Burton, who amicably participated and, being himself committed to decarbonizing sailing, saluted the eco-responsible approach of AURA AERO in this electric aircraft project.

The power-on, the first propeller revolution and the first roll-out of INTEGRAL E represent a major industrial milestone for AURA AERO. INTEGRAL E will begin its flight test campaign in a few weeks and the entry into service of the INTEGRAL electric

range is scheduled for 2026.

Mastering this new electric propelling system is an essential competence for the ERA program, the 19-seater regional transport aircraft currently developed by AURA AERO.





## Los Angeles International Airport Provides Reminders, Tips for Winter Travel

Los Angeles International Airport (LAX) is wrapping up the year with an anticipated busy winter holiday travel period. The airport is expecting more than 4 million passengers to use the airport between December 14 and January 3, a 12% increase compared to the same period last year.

“We are anticipating a daily average of 211,000 passengers to pass through LAX over the 21-day winter holiday travel period,” said Beatrice Hsu, Interim CEO of Los Angeles World Airports. “While our airport will be busier than usual, there are several ways to plan ahead and avoid the hassles that often accompany holiday travel. We encourage guests to arrive early, pre-book parking at FlyLAX.com, and take advantage of the LAX Order Now service to skip the

wait for concessions.”

Vehicle traffic in the Central Terminal Area (CTA) is expected to be heavy, with an average of more than 93,000 vehicles expected daily during the holiday period. Los Angeles Department of Transportation (LADOT) Traffic Control Officers will help direct traffic on the airport perimeter roadways and Airport Police Traffic Control Officers will direct vehicles in the CTA roadway.

Due to increased airport traffic and parking garages approaching full capacity, guests are encouraged to reserve a parking space in advance at Parking.FLYLAX.com. The new LAX Budget Parking facility, LAX Economy Parking, and CTA garages offer pre-booking options.

## US Air Carrier JSX Signs a Letter of Intent for 150 ERA Aircraft

JSX, the world’s first only 5-start premium regional air carrier, and AURA AERO, the French aircraft manufacturer and pioneer in low-carbon aviation, have signed a Letter of Intent regarding the ERA, the hybrid-electric 19-seater regional aircraft. The agreement is for 50 aircraft plus 100 additional options.

JSX is a Dallas, Texas based regional air carrier that provides up to 120 public charter flights daily to 24 business and leisure destinations across Arizona, California, Colorado, Florida, Nevada, New Mexico, New York and Texas in the US, with new offerings to Mexico and The Bahamas, as well. JSX currently operates 47 Embraer ERJ family aircraft, each reconfigured to offer 30 seats, and employs over 1,200 crew members.

ERA is a brand new eco-responsible aircraft. Concentrating many avionic, aerodynamic and propelling innovations, it is the solution to the decarbonization of regional aviation. This aircraft addresses the environmental challenges of the 21st century, reducing CO2 emissions by up to 80% compared to thermal aircraft in the same category, together with a significant reduction of direct operating costs, making regional connectivity viable again.

This JSX order and the plan to roll out ERA as early as 2028 will offer an extensive network of point-to-point flights, while confirming the maturity of the aircraft’s development, whose operating economics and environmental & operational performances are fit to the market.

# Hamburg Airport Joins International “Hydrogen Hub at Airport” Network

Hamburg Airport has become the first German and the 12th member of the international “Hydrogen Hub at Airport” network, to promote the further expansion of hydrogen infrastructure in aviation. The network’s membership already includes members from the airports, airlines and energy sectors in 11 countries including France, the USA, UK, Singapore, Japan, South Korea and New Zealand. The aim of the international network is to research, develop and expand the infrastructure for the use of hydrogen.

“We welcome Hamburg Airport as the latest “Hydrogen Hub at Airport” member. Hamburg Airport’s expertise in Hydrogen will be an invaluable asset in our ZEROe Ecosystem journey to build a future where aviation will be powered by decarbonised hydrogen. The journey to prepare airport infrastructure to support hydrogen and low carbon aviation begins on the ground with these partnerships. The growing involvement of airports worldwide, including Hamburg Airport, in Airbus’ “Hydrogen Hub



Christian Kunsch, Managing Director of Hamburg Airport, Nicole Dreyer-Langlet, responsible for research and technology at Airbus in Germany, Michael Eggenschwiler, CEO of Hamburg Airport, Karine Guenan, Head of ZEROe Ecosystem at Airbus sign the cooperation agreement.

at Airport” concept will be key to deploying hydrogen-powered aircraft by 2035,” said Karine Guénan, Vice President ZEROe Hydrogen Ecosystem.

The use of hydrogen to power future aircraft should not only significantly reduce emissions in the air, but also contribute to the decarbonisation of aviation infrastructure on the ground. In 2020, Airbus launched the Hydrogen Hub at Airports programme to drive research into infrastructure requirements and low-

carbon airport operations across the value chain. The cooperation in Hamburg includes Linde as well, a leading global industrial gases and engineering company.

“We are thrilled that Hamburg Airport is working together on equal terms with such international hubs as Paris - Charles de Gaulle and Changi Airport in Singapore as we make these decisive preparations for an energy transition in air travel,” said Michael Eggenschwiler, CEO of Hamburg Airport, at the signing of the

cooperation agreement. “I am very proud of that fact, and also of the pioneering work of our staff, who have been pouring their hearts into laying the foundations for this work over many years.”

Airbus presented its ZEROe concept aircraft in 2020 and the development of the corresponding technology building blocks is now being driven forward in a global R&T network focussing on the development of hydrogen technology for future commercial aircraft.





## Launch of the EU-funded Project SUN-to-LIQUID II Fuels from Concentrated Sunlight

Co-funded by the EU and Switzerland, the European research project SUN-to-LIQUID II was launched on 1 November 2023. Leading partner institutions from academia and industry will demonstrate scalability and high efficiency in the production of sustainable hydrocarbon fuel from water, CO<sub>2</sub> and concentrated sunlight via high-temperature chemical conversion.

The European Commission (EC) aims to eliminate net greenhouse gas (GHG) emissions on the path to climate neutrality by mid-century. The transportation sector

will play an important role in the transition to a society living on 100% renewable energy. Two key challenges towards achieving this target relate to (i) an increased feedstock basis for renewable fuel production and (ii) the long-term development of sustainable fuel technologies for aviation. While electrification, and likely also hydrogen, will play a major role in the decarbonization of transportation, there will still be a continued need for energy-dense liquid hydrocarbon fuels, especially for aviation and shipping. First-generation biofuels





cannot meet the required volumes, due to availability and sustainability constraints. Hence, scalable technologies will be required to meet the longer-term fuel demand. Solar radiation is the most scalable form of renewable energy.

SUN-to-LIQUID II will develop a set of versatile technologies for solar fuel production from water and CO<sub>2</sub>, such as:

- *an improved high-flux solar concentration system for applications using high-temperature process heat;*
- *efficient "solar-thermochemical" fuel production, i.e. a sunlight-driven high-temperature chemical conversion process, using novel 3D-printed materials in the solar reactor for the reduction-oxidation processes;*
- *heat exchange and recovery concepts to further improve the efficiency of high-temperature conversion processes.*

The ultimate output will be a step-change technology advancement and a roadmap for a robust and sustainable conversion pathway to produce high-quality renewable liquid fuel from the inexhaustible potential of solar energy.

SUN-to-LIQUID II taps into a virtually unlimited resource of sustainable fuel production by developing the technology and roadmap to produce high-quality renewable liquid fuel directly from water, CO<sub>2</sub> and concentrated solar energy. The primary objective of SUN-to-LIQUID II is to increase the solar reactor energy efficiency to more than 15% by improving the effective radiative absorption using 3D-printed redox materials with optimized structure and by recovering sensible heat during the temperature swing redox process. It will bring key advancements from laboratory-scale research in redox material and heat recovery to validation in an industrially relevant environment. Besides, this project will provide evidence for cost-effective >80% GHG emission reduction especially for aviation, with technical scalability to production potentials beyond projected demand. The project is built on the preceding Horizon2020 project SUN-to-LIQUID which successfully demonstrated on-sun solar-thermochemical fuel production on a 50-kW scale.



## Mehmet T. Nane re-elected as President of TÖSHİD

Mehmet T. Nane, Chairman of the Board of Directors of Pegasus Airlines, was re-elected as the Chairman at the Ordinary General Assembly Meeting of the Turkish Private Sector Aviation Enterprises Association. The Ordinary General Assembly Meeting of the Turkish Private Sector Aviation Enterprises Association (TÖSHİD), where the new Board of Directors and Supervisory Board were elected, was held on 20 December 2023. Mehmet T. Nane, Chairman of Pegasus Airlines, was re-elected as the Chairman of the Board of Directors of TÖSHİD at the first Board of Directors meeting held after the Ordinary General Assembly Meeting. The new Board of Directors of TÖSHİD, chaired by Mehmet T. Nane, consists of Mehmet Erdoğan (Vice Chairman), Hacı Say (Vice Chairman), Tuncay Eminoglu (Secretary General), Şükrü Can (Treasurer), Ali Sedat Özkazanç (Member) and Mehmet Bostan (Member).

TÖSHİD President Mehmet T. Nane said: "I am delighted to be elected to this important position once again and I would like to extend my sincere thanks to all our members. As all stakeholders of Turkish civil aviation, we continue to perform our duties with great dedication even in the most challenging times.

Thanks to its geographical and historical treasures, central location, quality service at affordable prices, advanced airport infrastructure and high airline seat capacity supply, Turkey is a country that offers comfortable and multi-choice transportation opportunities.



## Leonardo and Pratt & Whitney Canada Achieve First 100% SAF Flight

Leonardo and Pratt & Whitney Canada announced the successful completion of the first flight for a AW139 intermediate twin helicopter, powered by PT6C-67C engines, using 100% Sustainable Aviation Fuel (SAF). Accomplished at Leonardo's facility in Cascina Costa di Samarate (Italy) on 21 November, the 75-minute flight and ground tests evaluated engine performance with multiple power variation and other systems. The test showed an outstanding response to the new fuel with no significant differences compared to the use of Jet A1 fuel.

This goal marks a historic first for both Leonardo's helicopters and the Pratt & Whitney Canada PT6 engine family. Earlier this year in-service AW139 helicopters carried out

flights with SAF, blended with traditional jet fuel under the current certification standards, in Japan, Malaysia, and most recently UAE. All main civil-certified types within the Leonardo's helicopter product range are certified for operations using SAF with a blended ratio of up to 50%.

The 100% SAF demonstration flight of the AW139 is a further testament to the outstanding design and performance of the aircraft and its systems, ranking as the most successful helicopter in its class with an unrivalled and growing impact. With more than 1,100 AW139s in service worldwide and almost 4 million flight hours logged to date, this result shows another tangible benefit of the aircraft's possibilities to the many operators

carrying out missions in all weather and environmental conditions as they aim for more ambitious sustainability goals.

Gian Piero Cutillo, Leonardo Helicopters MD, said "With this latest result we are demonstrating how we can support the rapid evolution of sustainability requirements in aviation as the industry aims at a greater use of SAF in operations. We did so with the world-class AW139 testifying that this technology allows more sustainable operations keeping the same level of high performance, significantly contributing to lower CO2 emissions. We're committed to joining forces with aviation partners and suppliers, authorities, energy leaders and rotorcraft service providers to incentivise the use of SAF

to sustain carbon footprint reduction."

"This first flight effectively demonstrates engine functionality and is an important part of our long-standing efforts to support the development of future specifications for 100% SAF, a core part of our sustainable propulsion strategy," said Maria Della Posta, president, Pratt & Whitney Canada. "This is the first time a PT6 engine has flown using 100% SAF. This milestone builds on its unrivalled legacy of success and underlines how the engine family can contribute to a more sustainable future in aviation. Since entering the market 60 years ago, the PT6 engine family has clocked more than 500 million flight hours, 8.3 million of which were on PT6C turboshaft engines."

# Dronamics and Qatar Airways Cargo Sign World's First Cargo Drone Interline Agreement



Dronamics, the world's first cargo drone airline with a license to operate in Europe, and Qatar Airways Cargo, the world's largest international cargo carrier, announced today an interline agreement. The partnership marks the first interline agreement between an international airline and a cargo drone airline.

The interline agreement allows the extension of the delivery networks of both partners, significantly increasing their reach as well as providing access to areas previously hard to reach by traditional air freight. Through the agreement, Dronamics can offer cargo services from any of its droneports, initially in Greece, to the wider Qatar Airways Cargo network - including destinations such as Singapore, China, including Hong Kong, and the United States (JFK).

Qatar Airways Cargo is able to access remote locations that Dronamics serves, such as the Greek islands, on the Dronamics cargo drone network.

Through this network expansion, Dronamics customers can make a single booking to transport goods from a Dronamics droneport to any destination that the interline joint network covers, and vice versa. The potential for the flow of goods, from pharma to food, from e-commerce, mail and parcels to spare parts, is significant, enabling rapid and reliable shipments to and from locations not sufficiently covered by air freight.

"We're very excited to have the world's largest air cargo carrier as our partner for the first-of-its-kind interline agreement with our category-defining cargo drone airline. While currently less than 1%

of global trade moves by air, the vast global reach of Qatar Airways Cargo and their world-leading capacity and service give us the perfect platform to massively expand air cargo accessibility to countless more communities worldwide, enabling same-day delivery for everyone, everywhere," said Svilen Rangelov, Co-Founder and CEO of Dronamics.

"As a part of our VISION 2027 5-year strategy, we are committed to remaining at the forefront of our industry by embracing new disruptive technology. It is also within our DNA to support young ambitious companies like Dronamics and we are looking forward to seeing what the future holds for this exciting business. It is a significant milestone in the advancement of autonomous cargo drone transportation and we are proud to be the first

international airline to offer this service." said Elisabeth Oudkerk, SVP Cargo Sales & Network Planning at Qatar Airways Cargo,

Dronamics is expected to begin commercial operations in Greece early next year, focusing on establishing a same day service connecting Athens, the capital city, with the industrial north area of the country, as well as the islands in the south.

Earlier this year, Dronamics became the first cargo drone airline to obtain IATA & ICAO designator codes, granting it recognition on par with other international airlines, and the ability to issue air waybills to enable seamless bookings with its airline partners. This interline agreement is a crucial next step in Dronamics' plan to establish a cargo drone airline network with worldwide reach.



# RTX's Pratt & Whitney Canada Unveils High Voltage Bidirectional Mobile Charging Unit for Hybrid-Electric Flight Demonstrator



Pratt & Whitney Canada announced the development of an advanced mobile charging unit (MCU) capable of charging high-power batteries at up to 1500 volts, making it compatible with Megawatt Charging System standards the industry is advancing for high voltage power applications. Pratt & Whitney is an RTX (NYSE: RTX) business.

The MCU was developed in collaboration with the National Research Council of Canada (NRC) and the Innovative Vehicle Institute (IVI) as part of the RTX hybrid-electric flight demonstrator project.

“This is the latest example of our hybrid-electric flight demonstrator project, driving collaboration and innovation within Canada’s aerospace ecosystem to enable a more sustainable future for aviation,” said Alexandre Gagnon, vice president of corporate affairs, Pratt & Whitney Canada. “High voltage, bidirectional charging systems will be critical for a growing number of electric and hybrid-electric systems including aircraft, as well as other transport applications.”

The MCU is assembled from commercially available components

and can deliver up to 280 kW and 1500 volts. In collaboration with IVI, Pratt & Whitney Canada developed a distributed control and protection strategy. The NRC focused on the hardware design, assembly, testing and delivery of two charger units, which will be used on the hybrid-electric flight demonstrator project. The charger’s bidirectional capability enables it to both charge and discharge batteries, which creates opportunities to recycle unused energy back into the electrical grid.

Pratt & Whitney Canada continues to progress in testing the

propulsion system for the RTX hybrid-electric flight demonstrator, which targets a 30% improvement in fuel efficiency and reduced CO<sub>2</sub> emissions compared to today’s most advanced regional turboprops. In 2024, the propulsion system will be linked to batteries developed by H55 S.A., which will be charged using the new charger.

Hybrid-electric propulsion is a critical component of RTX’s strategy for enabling more sustainable aviation and supporting the industry’s goal of reaching net-zero CO<sub>2</sub> emissions by 2050.

# MD Helicopters Announces Record Orders for 2023

MD Helicopters, LLC (MDH) proudly announces record orders for the fiscal year 2023. The company experienced an increase in demand, resulting in the highest number of annual orders since 2008.

MD Helicopters credits this accomplishment to its renewed commitment to customer satisfaction, enhancing aftermarket services, and striving for excellence in both the military and commercial sectors. The company's focus and unwavering dedication to providing top-tier products and services have resonated with customers worldwide and across various markets, resulting in the substantial growth observed in 2023.

Among the key contributing factors to this success are significantly improving customer support, increased investment in direct communications with customers, enhancing manufacturing efficiencies, ensuring in-stock spares availability, and maintaining healthy supplier relationships. This strategic approach has not only strengthened MDH's market position but has solidified its reputation as a rotorcraft industry leader.

In addition to the Nigerian Federal Government (12 aircraft) announced earlier this year, recent commercial transactions involved MD 530Fs designated for multi-use missions. These additions include VIP aircraft sales, featuring an expansion to the Clemens Aviation fleet, procurement by the United States Department of Agriculture for agricultural missions, and fulfilling various utility needs, such as those of WCF Aerospace, representing Skydance Helicopters that specializes in power and utility services, amongst others. MDH is actively pursuing a well-rounded approach, emphasizing both military and commercial sales and showcasing the positive impacts of the company's recent changes.

"This achievement is a testament to our dedicated team and the trust our customers have in us," said Jason Lindauer, Vice President, Sales and Marketing of MD Helicopters. "We have an aggressive campaign underway to meet face-to-face with our customers, suppliers, and prospects to gather firsthand feedback and to continue to strengthen relationships. Our commitment to excellence remains steadfast, and we're excited about the opportunities ahead."



## Porter Airlines Orders 25 Embraer E195-E2s

Porter Airlines has exercised purchase rights to place a firm order for 25 Embraer E195-E2 passenger jets, adding to their 50 existing firm orders. Porter will use the new aircraft to extend its award-winning service to destinations throughout North America. The deal, valued at US\$2.1bn at list price, will be added to the Q4 backlog, and brings Porter's orders with Embraer to 75 firm, with 25 purchase rights remaining.

Porter, the North American launch customer for Embraer's E195-E2, has already taken delivery of 24 E195-E2s, and recently announced new destinations including Las Vegas, Miami, San Francisco, and Los Angeles; with destinations in Mexico and the Caribbean also planned. The aircraft are currently deployed from Eastern Canada, with a focus on Toronto Pearson International Airport and Ottawa. Halifax and Montreal are also seeing new services with the E195-E2. Porter has chosen to configure the 146-seat aircraft in a comfortable 132-seat all-economy configuration, with a variety of seat pitches on offer for their guests: 36, 34, and 30 inches.

Michael Deluce, President and CEO of Porter Airlines said, "At Porter, we entered a new era when we began operating the E195-E2 earlier this year. The jet is exceeding our expectations, especially in terms of fuel burn, and delivering an incredible level of customer satisfaction to our passengers with a quiet, comfortable ride. These additional 25 orders enable us to continue extending our reach throughout North America, with more exciting new destinations."

Arjan Meijer, President and CEO Embraer Commercial Aviation, said, "Porter Airlines is an exciting disrupter delivering an elevated passenger experience that's shaking up the North American market. Choosing the E2 to deliver an upgraded service is a huge endorsement of the jet's comfort and capabilities, and a further endorsement of the E2 - the world's quietest and most fuel-efficient single-aisle aircraft."

# Azorra Delivers First Embraer E190-E2 Aircraft to Scoot

Azorra is celebrating delivery of the first of nine new Embraer E190-E2 aircraft to Scoot, the low-cost subsidiary of Singapore Airlines (SIA).

A special handover ceremony was attended today by senior executives from Azorra, Scoot, and Embraer at Embraer's facility in Brazil. Named 'Explorer 3.0', in celebration of the third and newest fleet addition to the Scoot family, the delivery of the E190-E2 marks the first time a Singapore carrier is introducing an aircraft from the Brazilian manufacturer.

Leslie Thng, Chief Executive Officer of Scoot, says: "We are honored to be the first Singapore carrier to take delivery of this modern and fuel-efficient aircraft and the E190-E2 jets are crucial to our overall network growth strategy. The delivery of the first Embraer E190-E2



reflects our confidence in the demand for air travel and our commitment to connect our customers to more destinations at the same great value. We thank Azorra and Embraer for supporting us in this next chapter as we become the first major operator of the E2 in Southeast Asia."

John Evans, CEO and founder of Azorra, says: "It's truly exciting to be part of this new chapter for Scoot with the addition of E2s, facilitating optimized expansion of

its existing network and the development of new markets with such an efficient and versatile aircraft. This marks our biggest, most important step in expanding Azorra's commitment to the Asia-Pacific region. Together with our partners at Embraer, we're proud to deliver the

latest-generation aircraft from our firm orderbook, supporting network growth for our airline customers worldwide."

Arjan Meijer, President and CEO of Embraer Commercial Aviation, says: "Embraer's family of advanced-generation E-Jets are ideally suited for Scoot's ambitions, complementing the airline's existing narrowbody fleet with the E2's exceptional short-runway performance to enhance regional connectivity. Continuing our long relationship with Azorra, we look forward to seeing how Scoot's passengers enjoy the comfort and quietness of the most fuel-efficient aircraft in the narrow body space."

Scoot E2 services are set to begin in May 2024 with Explorer 3.0's inaugural flight to Krabi, Thailand.





# IATA WORLD CARGO SYMPOSIUM

Hong Kong, SAR China  
12 – 14 March 2024

Host Airline

Host Airport



JOIN US AT THIS YEAR'S **IATA WORLD CARGO SYMPOSIUM**

## DRIVING SUSTAINABLE AND INCLUSIVE GROWTH

**Celebrating our 17<sup>th</sup> anniversary, the IATA's World Cargo Symposium** is the go-to event for thought-provoking sessions, engaging speakers and informative program topics. Embark on a journey of discovery as we delve into this year's World Cargo Symposium theme: 'Driving sustainable and inclusive growth.'

REGISTER NOW ON [IATA.ORG/EVENTS](https://www.iata.org/events)

For more details please contact: [iatawcs@gl-events.com](mailto:iatawcs@gl-events.com)



# EBACE<sup>®</sup>

28-30 MAY 2024 | GENEVA



The 2024 European Business Aviation Convention & Exhibition (EBACE2024), Europe's premier on-demand aircraft and advanced air mobility event is the place where you will experience, enhance and help shape the future of business aviation. Save the date and make plans to join us in Geneva!

**LEARN MORE | [ebace.aero](https://ebace.aero)**

