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The biggest start-up in commerical history

PAGE 8



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passionate belief that the kingdom has what it takes to be a beacon for the future in the Middle East. At the heart of a remarkable change is Vision 2030. The programme launched by Saudi Crown Prince and Prime Minister HRH Mohammed bin Salman Al Saud aims

once inside there is an incredible open and

PERFECT VISION –

audi Arabia is often an enigma. From the outside it

can seem secretive and ultra-conservative - but

to achieve the goal of increased diversification economically, socially and culturally - and five years in, the plan has been adopted, and is driving Saudi business and

The aviation industry is often slow to adapt and adopt change, but anyone visiting the kingdom will immediately recognise that the drive toward change is working.

For the industry, the strategy is in place.

The goal is to turn Saudi Arabia into a leader in the global industry; enhance the customer experience; improve safety and promote long-term environmental sustainability.

The strategy will also empower growth in the tourism sector as the country welcomes the world. This means delivering seamless experiences to 330 million passengers

THE SAUDI STRATEGY IS ON TRACK across 250+ destinations and through transportation of 4.5 million tons of air cargo by 2030.

> The introduction of the speedy tourist visas has already seen that working. And to meet the demands, progress is being made to develop the most modern airline fleets in the world to service domestic, regional and transcontinental

The joined-up thinking is apparent. Conferences and exhibitions are heading to the kingdom; global football stars, boxers and golfers are flying in to play at world-class facilities. Beach resorts are under development and a spanking new world-class airline is being built to service the world-class airports under construction.

This special supplement, drawn together by the editors and correspondents from Arabian Aerospace magazine, provides a snapshot of the progress so far as we talk to airline leaders, regulators, airport consultants and look at how some of the leading companies in the sector are working to be part of the Vision. It is a brave new world – and it is an exciting one. Fasten

your seatbelts and enjoy the ride.

Alan Peaford, editor-in-chief, Arabian Aerospace







AIR TRANSPORT

07 The General Authority of Civil Aviation (GACA) wants to see the growth of Saudi-based airlines that can compete with foreign carriers.

- 08 Tony Douglas, CEO of Riyadh Air, teasing and revealing the plans for the new Saudi carrier.
- 11 The strategy and challenges behind Saudia airline's supercharged growth.
- 14 Low-cost carrier FlyNas is on course to achieve Vision 2030 objectives. **16** Staycations are a key part of the
- revival of Fluadeal 18 Saudi carriers are placing major orders

▲ FINANCE

19 The creation of a Saudi Arabian worldclass lessor is fast becoming a reality.

for new aircraft to cope with growth.

TOURISM

22 Tourism is the new oil for Saudi Arabia and opens up fresh opportunities for the aviation sector.

AIRPORTS

23 Saudi Arabia had the fastest-growing tourism sector in the Middle East

▲ BUSINESS AVIATION

- 26 The burgeoning demand for domestic and international charter in the kingdom
- 27 The Saudi Fixed Based Operator (FBO) market is showing signs of resurgence.

TRAINING

- **31** Coping with the steep increase in demand for qualified aviation personnel.
- **33** The first training programme for Saudi women in maintenance and engineering.

▲ HELICOPTERS

- 34 A JV to produce helicopters in-country is a big boost to the Saudi market.
- 38 Profile of The Helicopter Company (THC) which plays a key role at the heart of Saudi Arabia's rotary wing industry.

42 As Saudi air traffic grows, so do the challenges facing Saudi Air Navigation.

▲ REGULATORY

43 The kingdom reviewed its regulatory frameworks in order to put a world-class safety programme in place.

46 Saudia Technic prepares to open its massive new MRO village at King Abdulaziz International Airport in Jeddah.

▲ COMPANY PROFILES

48-53 How Rolls-Royce, Collins, Lufthansa Consulting and Boeing play a key role in the kingdom's vision.

▲ SUPPORT

54 Diversity on the menu for Catrion, and pressure increases on ground handling.

▲ ENGINEERING

55 Fast-growing aerospace engineering company GDC has transformed in order to deliver the Vision.

▲ SPACE

56 The Saudi Space Agency (SSA) is reaching for the stars.



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GACA

Few national aviation regulators have as challenging a period ahead of them as Saudi Arabia's GACA, as it oversees the huge expansion of civil aviation in the kingdom. Alan Dron reports.



The President of the General Authority of Civil Aviation (GACA) Abdulaziz Bin Abdullah Al-Duailej with Juan Carlos Salazar secretari general of the International Civil **Aviation Organization** (ICAO), who, on a visit to Saudi Arabia earlier in the year, admired the regulator's efforts to prepare for growth both safelu and securelu. IMAGE: SAUDI GAZETTE

Saudi-based airlines are key to the kingdom's vision

ew airlines. Expanded airports. Improved connectivity. Strengthened passenger rights. The aviation sector in Saudi Arabia is going through a transformation perhaps unrivalled anywhere else in the world in recent times.

Overseeing the rapidly changing aviation landscape is the kingdom's General Authority of Civil Aviation (GACA).

One of the most frequently-raised questions over the past year has been the respective roles of existing flag-carrier Saudia and the new Riyadh Air. There has been much speculation that Riyadh Air will take on the mantle of the kingdom's main international representative while Saudia will focus on domestic services and the religious tourism sector.

However, Mohammed AlKhuraisi, GACA's executive vice-president Strategy and Business Intelligence, casts doubt on this hypothesis. While stressing that both airlines will have independence to make their own commercial decisions and decide their fleet compositions, he says that both will serve the domestic and international markets.

Concerns have also been raised by some observers that the huge increases in fleets that will come online in the next few years will lead to overcapacity.

Riyadh Air and Saudia have each ordered 39 Boeing 787s, plus a total of 43 options between them, while a major narrowbody order from Riyadh Air is expected imminently. Additionally, low-cost carrier (LCC) Flynas plans ultimately to grow from its current 50-plus fleet to 250, while the new NEOM airline and a planned LCC to be based at Dammam will add more airframes.

However, AlKhuraisi believes that there is no risk of too many seats chasing too few passengers. "I don't see that as a threat," he said. Changes in flag-carrier Saudia's dispositions mean that more capacity will be needed to fill the gaps.

"In 2019, Saudia was stretched too thin to operate all of Saudi Arabia's airports," he said.

With the company pulling out of Dammam and Madinah, a vacuum has developed that will need to be filled. The same will happen when Saudia moves out of Riyadh to allow

Riyadh Air to establish its home hub there. Saudia will focus on its traditional base, Jeddah.

Exacerbating this capacity crunch, in recent years fullservice carrier Saudi Gulf Airlines has ceased trading, while Saudi-Egyptian carrier Nesma – while still flying into Saudi Arabia – no longer bases aircraft in northern Saudi Arabia to operate a network of regional routes.

These factors have added to the shortage of capacity that GACA wants to see filled.

Additionally, the expected rapid rise in the number of tourists and business travellers will mean that more capacity will be required.

While Saudi Arabia has previously talked of increasing the number of inbound tourists to 100 million by 2030, AlKhuraisi revealed that this figure has recently been revised to 150 million. If this new figure is to be met, then there will be an even greater need to increase capacity.

While two full-service carriers, Saudia and Riyadh Air, should be sufficient to cater for that section of the market, AlKhuraisi believes that there is still a shortage of low-cost travel capacity, even allowing for the rapid growth of LCCs Flyadeal and Flynas.

"We still need more capacity beyond what Flynas and Flyadeal have in the pipeline," he said. "We've aggregated the book orders of Flynas and Flyadeal and we can still see a shortage over the long run. The country is heavily leaking [traffic] to foreign carriers to certain destinations."

Saudi Arabia either lacks connectivity to certain destinations or, if it has connectivity, it has a low market share, he said.

GACA wants to see that leakage reversed by the growth of Saudi-based airlines that can compete with foreign carriers.

Meanwhile, with more and more Saudi citizens planning to take to the air, GACA is rolling out a new set of passenger rights, covering everything from denied boarding to lost bags.





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GACA wants to

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of Saudi-based

airlines that

can compete

with foreign

FLAG CARRIERS



A major part of the Aviation Strategy for Vision 2030 is the launch of a new carrier for Saudi Arabia. **Alan Peaford** talks to the airline chief executive Tony Douglas about the plans.

t is unheard of for a start-up airline to capture the headlines at the world's largest airshow. But when Riyadh International Air (RIA) flew into Le Bourget with its launch aircraft – a Boeing 787 Dreamliner – in a standout livery, that was what happened.

For Tony Douglas, the man appointed to steer the fledgeling national carrier to entry into service – scheduled for 2025 – it was not a surprise.

"It is such an exciting moment," he said at the time. "There's an emotion that goes with it because we've been working on this for some time. But this is the first opportunity to present this livery to an international audience is one that we will never forget.

"This is not a story of an airline that is adding to an existing fleet, changing somebody's expectancy. This is a completely fresh story.

"It is probably the biggest start-up in commercial aviation history, and one that has no legacy. Because of that we can probably choose to do some things quite differently."

The airline is likely to be announcing its second new livery quite soon. "We plan to tease and reveal," said Douglas. "Because we've got two years before our first commercial flight, probably give or take two months, what we're going to do is tease something out, and then reveal it to be

able to build that excitement to maintain a connection with what we're doing with the brand."

In March the airline announced its first aircraft order, for "at least" 39 Boeing 787 widebody jets, with options for 33 more.

Riyadh Air is also in talks with manufacturers for a fleet of narrowbody jets, which Douglas said should allow Riyadh Air to serve more than 100 destinations by the end of the decade.

"We will be making a second, sizeable, narrowbody aircraft order in the coming months, and it will be sooner rather than later," Douglas said teasingly.

The airline will be present at the Dubai airshow in November, but Dougas has already said that won't be the time for seeing the promised "incredible" interiors of the three-class widebody fleet. "The front will be business-plus but we will not feature a first class, because that, in our opinion, would be sub-economic," he said.

But the promise is clear. Riyadh Air will be very different across the board.

Douglas was previously the chief executive of Etihad Airways, the UAE's national carrier. But he doesn't see his former employer, nor the other Gulf giants of ${\it Emirates}$ and ${\it Qatar}$ Airways, as targets.

The 'Big Three' have grown by offering connecting flights through their huge home airports to and from destinations in other parts of the world. But Douglas said Riyadh Air will instead focus on carrying passengers going to and from Saudi Arabia, supporting the Vision 2030 drive to grow tourism and industry through the kingdom.

"If we look at our closest neighbour, Qatar Airways has an incredible international network, global reach, with a population of give or take two million people," he said. "Qatar has done a brilliant job of offering its home country world-class connectivity," he said. "A very substantial percentage of that traffic is transfer. Very little of it proportionally is point to point."

Douglas said Riyadh Air will operate domestic, regional and long-haul flights, serving a network of more than 100 destinations by the 2030 target.

Douglas said he expects Riyadh Air to be in every major European capital and at key cities in the Americas, Africa and Asia – his team is already in talks to develop partnerships to help meet the growth plans – unlike the Saudi capital which is underserved by international carriers.

In an interview with *Flightglobal* in September, Douglas said the lack of connectivity

to Riyadh was surprising.

"If I use the eastern network as an example, currently the capital city, Riyadh, of the world's fastest-growing economy doesn't connect directly to Beijing, to Shanghai, to Chengdu, to Guangzhou, to Tokyo, Seoul, Sydney. The list just goes on and on," he said.

Since the launch, Douglas has frequently been asked whether the kingdom is big enough for two major flag carriers and the growing domestic and low-cost airlines.

"The landmass of Saudi Arabia is equivalent to the whole of France. Plus the whole of Spain; plus the whole of Italy; plus the whole of Germany; plus the whole of Belgium; plus the whole of the UK. The landmass of the kingdom is half the size of Western Europe. So flying from Riyadh to Jeddah is the same as flying from London Heathrow to Rome.

"So is there enough separation space? Look at Paris Charles de Gaulle and Amsterdam Schiphol. They are obviously geographically close and what we're talking about is the kingdom's two big cities, an hour and 45 minutes flying time away from each other.

"We're talking about a kingdom that has a big population, in the high 30 millions. We are talking about the second-fastest economy in the world in terms of GDP

growth, and we're talking about a G20 country. The population has an average age of 30, give or take a few years. And there is of course a huge desire to be better connected in terms of travel.

"So we will work as sister national carriers, so as we start scaling up, Saudia will hub primarily from Jeddah, which has always been its home. But that will take time.

"Every aircraft we get delivered will allow us to put another potential destination into our network. So it will be a very close, wellorganised relationship."

The youthful population of Saudi Arabia has also given Douglas and his team another key focus – being a digitally native airline.

"During the course of next year, there will be probably two, maybe three reveals of what digital native actually looks like, and to demonstrate how it works." he said...

Douglas said Saudi Arabia is No
1 per capita in the world in
terms of iPhone operating
system (iOS) adoption.
"We will be a digital
native because our
guests for the future
will demand we
interact with just
about every device
they use in that
way," he said.

"We have to make sure that everything we do is designed more for the digital world in ways that legacy carriers never can.

"It will be around the ways in which we interact," he said. "We have an obsessive attention to detail with guest experience. If you've put detail on your profile, as you would on a banking app with facial recognition, and tell us for example that you're left-handed, when you sit down in the future, the knives and forks will be the other way around. It would be rude for us not to if you'd told us.

"In a legacy carrier environment, the cabin crew wouldn't know what you look like. So even if you had told us you're left-handed, we wouldn't know who you were. So, there's a way we can bring our obsessional attention to guest experience detail by using the same digital differentiation."

Saudi Arabia is determined to deliver a

difference. Having brought talent such as
Cristiano Ronaldo to its burgeoning
professional football league, it has
done the same with the head of

its newest airline.

Tony Douglas knows the challenges but has bought into the vision. Without the constraints other start-ups may face, the teasing and the revealing will ensure that we remain as excited in 2025 when the first passengers – or guests – walk on board to have their unique flight experience, as we are today.

It is probably
the biggest
start-up in
commercial
aviation history.
TONY DOUGLAS

air transport

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Saudia is on the fastest growth trajectory in its history, tasked with doing its duty to help transform the Kingdom's economic prosperity and social fabric. Captain Ibrahim Koshy, chief executive officer of Saudia, explains the strategy to Mark Pilling.

Wings of the Vision

here is a lot on our shoulders," said Ibrahim Koshv: Saudia has a key role to play to help his country achieve its transformative Vision 2030. "We consider ourselves as the flag carrier, the wings of the

Vision 2030," he added, as the carrier undergoes a top-tobottom overhaul in a period of supercharged growth. "It is a big challenge, and we know we must meet the

targets. For example, we talk about the 330 million airport visitors annually as a target. That is quite a big number," he noted, with typical Saudi

Another big number enshrined in Saudi Arabia's Vision 2030, which is designed to diversify the country's economy away from a reliance on oil, is the 100 million international visitors it wants to welcome by the end of this decade.

The numbers are so eve-wateringly large that no single airline can achieve them. "When you look at it, we need the other airlines, whether its Riyadh Air or Neom Airlines," said Koshy, referring to new carriers being established in the

Kingdom in the coming couple of years. "Together we are going to make this happen.

"There's a lot taking place, there are the growth plans for our Jeddah hub as well as our Riyadh hub. We'll be operating a dual hub operation for quite some time," said Koshv. "We're very excited about this, but we understand the

on Page 12

11

It is a big challenge, and we know we must meet the targets. **CAPTAIN IBRAHIM KOSHY**



SAUDIA

CONTINUED FROM PAGE 11

challenges are serious, and it keeps a lot of people in the offices late to be sure that we're doing everything required to make it happen."

The pilot-in-command is Koshy, who logged more than 10,000 hours in a 25-year flying career for the airline, taking on flight operation management roles as his experience grew, before transitioning to the boardroom in 2017. He began as chief operations officer and was promoted to chief executive in February 2020.

After navigating skilfully through the Covid-19 crisis, where Saudia was aided in its recovery by the country's strong domestic market, Koshy is directing a mission that seeks to transform its network, fleet, product and brand in a period of just a few years.

"If we look at 2023, we have already announced 11 new destinations and we will be in the 20s by the time this year is over," said Koshy. New international destinations this year include Beijing, Dar es Salaam, London Gatwick and Nice.

The carrier recently took delivery of the first of 20 Airbus A321neos to feed the new routes, and another two Boeing 787s will enter its fleet this year.

In March, Saudi announced an order for 39 of the Boeing widebodies with options for 10 more. The agreement will include both 787-9 and 787-10 models and will add to its existing order of 38 of the type that it expects to receive by 2026.

This satisfies Saudia's widebody needs for now, but a "narrowbody campaign is very aggressively under way," said Koshy, with another substantial order being finalised.

"Today we are about 140 aircraft in our fleet, and we are serving about 100 destinations. By the time we get to 2030, there will be an additional 100 aircraft. The number of destinations in our network will be closer to 145.

"But it's not just about the growth. It's also about the product. It's about the punctuality and about the experience," he explained.

Investment in all these aspects of Saudia's product is designed to bring it up to the world-class standards pioneering by brands such as Singapore Airlines and exemplified by Emirates and Oatar Airways in the Gulf.

Saudia must compete with such brands as it seeks to attract travellers to the country and capture previously ignored transit traffic over its Jeddah and Riyadh hubs.

The carrier must also become the go-to carrier for nationals. "I think the type of passengers we are seeing will be much more demanding going forward. We see a younger generation that continuously needs to be connected," said Koshy.

Understanding the importance of the onboard experience, in-flight entertainment systems and connectivity has led Saudia to a major upgrade for its entire fleet.

"For example, I think people will be very impressed with the type of suites we're putting



on a narrowbody," he said. Saudia is fitting the premium cabin of its fleet of long-range A321XLRs with Thompson Aero Vantage Solo seats. The first aircraft are planned to enter the airline's fleet in 2024.

"It's a beautiful product, fully flat bed in a narrowbody aircraft with 18in IFE screens," said Koshy. The new A321s will also feature Saudia's Beyond IFE system, developed by Panasonic.

The airline's current fleet of A330s and 777s will be retrofitted with the Beyond system while Safran's Z400, its latest economy seat, will be installed fleetwide too.

Taken together "this is a substantial improvement on what we offered historically," explained Koshy.

"I think it's a very exciting time for our passengers locally. It will be a completely different Saudia before we reach 2030. Saudia will be at a level that will be very hard to beat by the time we hit 2026," he said.

The Skytrax global airline rankings suggest Saudia is already making swift progress. In June at the Paris airshow, the carrier jumped to 23rd

in the 2023 ranking of the world's best airlines. It is making strides, having risen from 82nd to 51st place in 2017 and earning the distinction of 'world's most improved airline' twice between then and now.

As the carrier makes headway in capturing transit traffic, around 30% up on historical levels, traffic numbers overall are healthy, explained Koshy. By the end of July, Saudia had reached 16.5 million passengers for the year to date, putting it on track to exceed its budgeted target of just over 32 million in 2023, he said.

There was some risk identified by Saudia in the drive to grab more transit travellers. "We did fear straining the system as we started working towards more connecting passengers as we were not historically geared up as hubs," said Koshy. The fear was a negative impact on its on-time performance (OTP) and its Net Promoter Score.

"We put so much attention on it that our OTP has improved: we finished with an 86% OTP on departures and 80% on arrivals and that makes us one of the top 10 airlines in the world," said Koshy. This period includes the carrier's

extremely busy Hajj pilgrimage season this summer when it flew 1.2 million passengers.

Although Saudia does not publish financial information, it is doing well. "This year we have been on a very strong trajectory, we are on the right track," said Koshy.

"With the transformation that is ongoing at Saudia we have improved efficiencies so much that we've been able to cut our costs substantially," he said. "I can say that this year will be the best financially in Saudia's history."

Saudia has a raft of business projects under way and some already delivered under its strategic plan, dubbed Shine. "This is a major transformation for the airline which touches on every aspect of the business from flight crew management to reservations and IT systems," said Koshy.

There are several digital technology components of Shine, with rollouts of new features and products almost every month and into 2024. "There will be improvements on the Saudia app and the Alfursan loyalty programme," he said.

"In addition, there is more to Shine than just improving the passenger experience and the digital experience for passengers and staff. We are making changes to the way we do business."

Koshy is specifically referring to raising the bar on sustainability, which is increasingly important for the country in the way it is developing environmental policies and targets around tourism. For example, the types of traveller Saudi Arabia seeks to attract to the Kingdom's flagship net positive carbon emission resorts such as the Red Sea Project will expect airlines to be hitting their green targets.

"I think sustainability is becoming highly important for Saudia," said Koshy. The use of Sustainable Aviation Fuel (SAF) will play a key role, and Saudia is "working with partners to see if we can use a combination of SAF and Low Carbon Aviation Fuel. We will be technology agnostic and work with whatever works best for reducing our emissions and carbon footprint."

One intriguing prospect, with a sustainability angle, is the introduction of electric vertical take-off and landing (eVTOL) aircraft into Saudia's operation. It has signed a letter of intent to acquire 100 all-electric Lilium Jets, the first flag carrier in the Middle East to invest in this emerging sector.

The eVTOL routes are being studied today. "We are talking about a truly sustainable air mobility solution as part of the Saudia network," said Koshy. Many carriers are targeting an eVTOL operation by 2030, and while he understands there are regulatory dependencies he has "a strong conviction we may introduce this in the 2026-27 timeframe".

As Saudia expands, it is on a major recruitment drive. In the past, the carrier has drawn a lot of its talent from within Saudi Arabia, but this has changed, with workers increasingly being recruited from overseas too.

"With the growth of aviation that's going to happen in Saudi Arabia over the next 10 years, I think there will be challenges," said Koshy, whether it is finding sufficient flight crew, MRO personnel or managers of the appropriate calibre and experience. "But it is something that we are already pushing in coordination [with others]," he noted. There are training initiatives under way in partnership with various aviation players in the Kingdom.

Two Boeing 787s will enter the Saudia fleet this year. Saudi has ordered 39 of the Boeing widebodies with options for 10 more.

A major positive for luring talent to Saudi Arabia is that the country is becoming a more attractive place to live and work. "I think there are very few places that will be able to compete from a lifestyle perspective as we go into the next five years," said Koshy.

Asked what keeps him awake at night, Koshy said: "When we think of the challenges going forward, there is a lot depending on Vision 2030 and we really need to meet these targets.

"We have year-by-year, annual plans on how to meet them," he said. Anything that might derail Saudia's growth trajectory will add pressure and the aircraft delivery delays of late from Airbus and Boeing are top of mind.

"We get a little worried about capacity being available when we need it," he said, referring to planned openings of new routes.

Saudia has been impacted by delays in the past year and wet-leased 26 aircraft to fill the void, said Koshy. Some are still with the carrier, but the impact is easing, and most have left the fleet again as Saudia obtains a "clearer picture" of its delivery flow of new aircraft.

This is critical as Saudia seeks certainty to execute on its plans.

On many fronts, the airline's story is one of a remarkable turnaround from a classic legacy carrier to one reborn, with an overhaul of its business practices, product and strategies as moves into a never-seen-before aggressive growth phase.

FLYNAS



Tith all the razzmatazz surrounding the expansion of the Saudia Group and the arrival of Riyadh Air, outside observers sometimes overlook low-cost carrier (LCC) Flynas.

They shouldn't. This is a company whose long-term plans are to operate a fleet of 250 aircraft and which is well on the way to achieving its objective.

At this year's Paris airshow, Flynas firmed up an order for 30 A320neo family aircraft, increasing the airline's orderbook with Airbus to 120. At least 10 of these will be the larger, longer-ranged A321XLRs, which will allow Flynas to expand its route map well beyond its current limits.

The A321XLR will have a range of around 4,700nm (8,700km). This would allow the aircraft to range as far as Ireland and Finland, as well as extending the airline's reach into Asia.

By September, the latest month for which figures were available at the time of writing, the company had taken delivery of no fewer than 11 new A320neos this year, increasing its fleet to 56 aircraft, with eight more scheduled to arrive by the end of 2023. The fleet has more than doubled in size over the past two years.

This year has also been notable for the airline adding four Airbus A330-300 widebodies, which are being used for long-haul pilgrimage flights. The airline aims to have transported more than 100,000 pilgrims by the end of this year.

In the first half of the year, Flynas reported that it flew around five million passengers, an increase of 26% compared to the same period in 2022. The airline is the third-largest provider of domestic connectivity in Saudi Arabia, with a 20% seat capacity share. Saudia has 54% of the market, followed by its low-cost subsidiary Flyadeal on 25.7%.

Internationally, Flynas has a 9.3% share of passengers departing Saudi Arabia – second only to Saudia, with 28.4%.

The company's route map has now grown to more than

70 domestic and international destinations with the aim of reaching 165 in line with the objectives of Saudi Arabia's Vision 2030 project.

The expansion of Flynas's route map is being helped by Saudi Arabia's Air Connectivity Program, which was established in 2021 to support tourism growth in the country by providing support for Saudi Arabian airlines developing existing and prospective air routes.

As part of this expansion, Flynas has joined the trend among Gulf carriers of expanding into Central Asia. This year alone it has launched services from Jeddah's King Abdulaziz International Airport to Bishkek and Osh in Kyrgyzstan, and Almaty in Kazakhstan, while also increasing the frequency of flights to Uzbekistan's capital, Tashkent.

At home, the company has also expanded this year, having signed an agreement with Tibah Airports Operation Company to open a new base at Madinah's Prince

Mohammad Bin Abdulaziz International

This means that Flynas has become the only Saudi carrier to operate four bases within the country, the others being Riyadh, Jeddah and Dammam. It expects to launch new domestic and international services from Madinah

before the end of the year, as more of its ordered aircraft arrive.

Opening the new Madinah base fits into Saudi Arabia's Pilgrim Experience Program, a strategy that aims to provide the opportunity for the largest possible number of Muslims to perform Hajj and Umrah by facilitating access to the Two Holy Mosques in Mecca and Madinah, said Bander

Almohanna, Flynas chief executive and managing director.

As well as religious visitors, Flynas – in common with the other Saudi carriers – is starting to benefit from the country's new stopover visa.

This can be issued after an air ticket to the country has been bought and allows visitors to remain in the country for up to four days to sample its attractions.

Flynas is gradually replacing its
Airbus A320ceos with the neo
version.

MAGE- ALAN DRON

A WORLD-CLASS ACADEMY FOR SAUDI ARABIA - A SAUDI ARABIAN ACADEMY FOR THE WORLD



الأكاديمية الوطنية للطيران National Aviation Academy

THE SAUDI SUPPLY PROBLEM

The success of any industry is directly related to its ability to manage the supply chain. For the Saudi aviation sector, that supply chain has been largely outsourced. The military, airlines, and private companies have all looked to overseas training solutions to solve staffing needs.

The problem lies in the reliability of that supply chain. Political disputes, industry fluctuations, economic imbalances, and global pandemics can (and have) wreaked havoc on supply lines not only for aviation, but for almost every industry worldwide.

IF NOT QUANTITY, THEN QUALITY

Assuming overseas training companies can meet the integer demand for training, there are often issues with quality. Being physically removed from the training process means decreased oversight, and an inability to properly manage the quality of the training.

Moreover, cadets miss the opportunity to train in their own environment, airspace, and regulatory body. This opportunity cost then must be absorbed by the operator, thereby increasing training time, cost, and manpower needed to realize a line-ready pilot.

THE VISION 2030 SOLUTION

With the rapid growth of aviation in Saudi,

experts forecast that the pilot shortage problem will be sharper and deeper than other areas of the globe. New airlines, new commercial operators, and the might of the Public Investment Fund (PIF) all point to an exponential increase in pilot jobs for Saudis.

Enter the National Aviation Academy (TAYARAN). The National Aviation Academy is a non-profit organization - located in Riyadh - committed to providing safe, high-quality training to the Kingdom of Saudi Arabia.

TAYARAN is dedication to Vision 2030, and is already creating jobs for Saudis, and supplying the Kingdom with highly trained Saudis.

TOTAL TRAINING

To prepare cadets for rigorous aviation training, TAYARAN offers a complete Foundation Program which includes English language, math, computer skills, health and safety, and aviation English curriculum to students who need a bridge from high school to the flight line. This course is offered in downtown Riyadh.

The National Aviation Academy's Pilot Program in Riyadh is a fully certified GACA 141 flight school offering airplane training including Private, Instrument, Commercial, and Multi-Engine certifications. The Academy can also train part-time students in a wide array of training and currency programs.

Alternatively, students can also elect the Aviation Maintenance Technician track in Jeddah. This GACA certified Part 147 school is conducted in partnership with BAE SDT and offers Airframe & Powerplant training and certification.

MILITARY APPLICATIONS

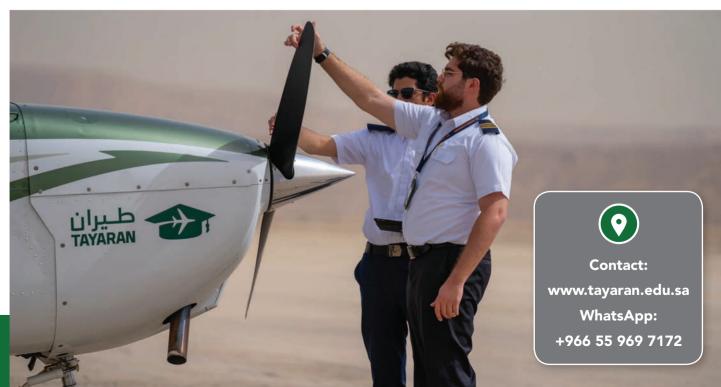
The National Aviation Academy stands ready to support all military branches with customized training programs. These courses can be duplicated from approved syllabi already in use, or from scratch as the product of a deep dive into customer needs. Regardless of the source, the National Aviation Academy can deliver a quality product, on-time, and on-budget.

TAYARAN is also pleased to provide conversions of military pilot ratings to civilian GACA certificates.

ON THE HORIZON

Currently under development is the Helicopter Training Program, The TAYARAN-INTRA Academy for UAV applications, ICAO short courses, and much more.

The National Aviation aAcademy's future is both bold and bright.



FLYADEAL

Flyadeal turning into a big deal

Although it is only six years old, and lost two years of growth because of the pandemic, Flyadeal is establishing itself rapidly as a strong low-cost player in the Kingdom. Mark Pilling reports.

ne of the few positives to come out of Covid was the discovery by Saudi nationals of their home country's rich sights, sounds and culture.

The idea of the 'staycation', taking a holiday by staying at home rather than going abroad, in addition to helping families see each other again helped Flyadeal, the largest low-cost carrier (LCC) in the kingdom, recover quickly in the post-pandemic year as domestic travel surged in Saudi Arabia.

The pandemic also opened the eyes of many to the leisure destinations and opportunities available in their home country as Saudi tourism came to life.

Flyadeal was able to revive its dormant, mainly national, network and revenue began to flow again. This young airline, which took to the air only in 2017, has been able to bring its expansion plan back on track, beef up its domestic network, bolster its aircraft orderbook, and begin expanding internationally.

The launch of a new LCC in Saudi Arabia came at the right time with the market ready to grow, embrace low fares and point-to-point travel.

Prior to this, the market was a duopoly with Saudia offering the full flag carrier network and experience, while Flynas had started operating in 2007, initially as the kingdom's first LCC. However, its business approach has morphed towards a hybrid carrier model.

By 2015, the government saw the potential for market growth and encouraged new entrants to test the market. One of the start-ups was privately-owned SaudiGulf Airlines, which operated from 2016, but went bankrupt in 2020 and ceased flying.

The Saudia Group was looking at it strategically and believed there was a whitespace for a true low-cost airline to come into the market. It concluded that it would be better if it was part of the Saudia family rather than creating a potential competitor.

A couple of years after its inaugural flight in September 2017, Flyadeal's rapid progress was thwarted by the pandemic, but operations are now back on track. It entered the pandemic with 11 aircraft and came out of it with 27 with the fleet now reaching 30 aircraft and more than 20 million passengers flown.

Flyadeal is a wholly-owned subsidiary of the Saudi Arabian Airlines Group with its own P&L. It has an LCC mindset with its own board of directors, systems, leadership, processes, ethos and culture to set it apart from its parent.

Flyadeal does not reveal financial information, but the carrier is profitable. It went into the red because of Covid but in 2022 returned to the black and is on track to be profitable this year.

With the kingdom looking to triple its passenger numbers by 2030 as part of Vision 2030, Flyadeal is on a steep upward trajectory with fleet investment and aggressive capacity growth.

While part of the Saudia Group, Flyadeal is run as a separate business with joint planning where it makes sense. While aircraft requirements are determined by the airlines individually, at a group level there is a fleet committee and a network committee to coordinate fleet procurement.



Flyadeal's 30-aircraft fleet is entirely made up of Airbus A320 family types with 11 A320ceos and 19 A320neos in service.

The demographic that Flyadeal is attracting represents a different market to that of Saudia, bringing point-to-point travellers that grow the overall market rather than grabbing market share from others.

At present, Flyadeal's 30-aircraft fleet is entirely made up of Airbus A320 family types with 11 A320ceos and 19 A320neos in service. The carrier took delivery of its 30th aircraft, an A320neo, in mid-September, with a further two A320neos due to be delivered by the end of the year.

It has more A320neos being delivered over the coming two years and has 20 more options with Airbus. More narrowbody aircraft will be acquired as the decade progresses and Flyadeal is preparing to add a sub-fleet of widebodies as the network develops. By 2030 it plans to be a 100-aircraft airline.

Much of Flyadeal's focus has been to establish a domestic network from its three largest bases of Riyadh, Jeddah and Dammam. The carrier has worked longer than expected on its domestic build-up simply because there was such a big appetite for the low-cost product in Saudi Arabia.

While the domestic network was created more quickly than expected, Flyadeal delayed its international launch. Now, its attention is turning to expansion further afield.

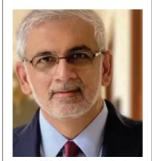
Over the past year, Flyadeal has added destinations such as Dubai, Cairo, Istanbul, Amman and Kuwait City, and in March announced further expansion with 12 routes to European and regional destinations. This represents a 127% capacity increase in seasonal capacity compared to summer 2022.

Seasonal services to Turkey's beach resorts, Bosnia and Greece are its first routes to Europe as it builds its network.

As Flyadeal develops it has recently undergone its first leadership change, with founder chief executive Con Korfiatis stepping down in September to be replaced by Sanjiv Kapoor, another airline industry veteran, as acting chief executive.

An American, Kapoor had been working as an advisor to the Saudia Group director general since May 2023.

It is believed unlikely that this changing of the guard at Flyadeal will bring major strategic change in direction at the carrier, which looks well set to continue its successful launch well into this decade.



Acting CEO: Sanjiv Kapoor had been working as an advisor to the Saudia Group director general. IMAGE: FLYDEAL



-INANCE

GROWTH



AIRLINES THINKING ON THEIR FLEET

With Saudi Arabia's Vision 2030 policy targeting a huge increase in air passengers, new and existing airlines are creating or boosting their fleets. **Alan Dron** reports.

The figures are startling. Saudi Arabia, having handled just over 100 million passengers in 2019, wants to increase that figure to 330 million by the end of the decade.

The kingdom foresees a huge leap in inbound tourists, as a swathe of new holiday attractions come on stream, but also anticipates significant growth in travel among the young, affluent Saudi population.

Saudi carriers are placing major orders for new aircraft to cope with this anticipated boom, with fleets steadily growing as a result.

Flag-carrier Saudia, for example, placed an order at the 2019 Paris airshow for an additional 30 Airbus A320neo family jets, taking its order book for the type to 65 (plus 35 options), with some destined for its low-cost carrier sister-company, Flyadeal. Those aircraft are now starting to arrive. And in March this year, Saudia announced an order for 39 Boeing 787-9s and -10s (plus 10 options).

At June's Aircraft Interiors Exhibition (AIX) in Hamburg, Flyadeal's then-chief executive, Con Korfiatis, said that his airline intended to go even further and was in discussions to firm up 20 options with Airbus, on top of the 30 A320neos for which it signed up in 2019.

There is a strong possibility that the options will include larger-capacity A321neos for some of the company's trunk routes. The LCC is also looking at acquiring widebodies on a permanent basis, having leased three A330-200s this year to carry pilgrims to Mecca.

In March, meanwhile, new flag-carrier Riyadh Air ordered 39 787-9s, the longest-range version of the Boeing widebody, together with a further 33 options.

And low-cost carrier Flynas has an order book for 120 A320-family aircraft and has plans for its fleet to increase to 250. It aims to induct no fewer than 19 A320neos this year alone

Meanwhile, there is much interest in two planned

newcomers to the country's portfolio of airlines.

NEOM airlines will serve the planned new giga-resort of Neom on the northwest coast of Saudi Arabia. Few details are available, as the planned airline has yet to start the application process for its Air Operators Certificate (AOC). However, in March, chief executive Klaus Goersch wrote in a blog that the end of 2024 was its target for taking to the skies.

Assuming it does, its role will be solely to bring in tourists to the new resorts that will line the Red Sea coast.

Also waiting in the wings is the planned new LCC that will be based at Dammam, on the kingdom's east coast.

Four groups have submitted proposals to create this new airline. There is a stipulation that whoever wins must be Saudi-owned with a minimum 51% shareholding.

Saudi aviation regulator GACA is at an advanced stage of sifting through the details of the proposals. An announcement on the winning bid is unlikely to be made in time for the Dubai airshow, but may materialise shortly afterwards, say GACA officials.

Both NEOM airlines and the new LCC will also be ordering aircraft, adding to what are already substantial figures in anyone's terms – indicators of the country's ambitions.

Those ambitions are being encouraged by partnerships between the airlines and the country's Air Connectivity Program (ACP). Launched in 2021, the ACP is financed by the state-owned Public Investment Fund (PIF), with the aim of subsidising the country's airlines when opening new routes.

This is part of the initiative to vastly increase the number of inbound tourists to the country. Originally set at 100 million by 2030, that figure has recently been substantially increased, to 150 million.

If these estimates are correct, there will be no risk of overcapacity in the Saudi market. If anything, says GACA, there is currently a shortage of seats in the marketplace. The large orders placed by the country's airlines will address that shortage.

AviLease has taken a major step forward in its ambitions to be a leading air finance player with its acquisition of Standard Chartered's aircraft leasing business. **Mark Pilling** reports.

AviLease raises the Standard to flag its top ten ambitions

he creation of a Saudi Arabian world-class aircraft lessor is fast becoming a reality following the \$3.6 billion deal, announced in August, under which AviLease will acquire the Standard Chartered (SC) aircraft leasing platform.

Described as a "landmark transaction", it will accelerate AviLease's plan to become a top-10 global lessor by 2030, said the company.

Riyadh-based AviLease has moved fast to establish itself, having been formed only in July 2022 by the Public Investment Fund (PIF), Saudi Arabia's sovereign wealth fund.

Upon launch, AviLease announced its first deal with local carrier Flynas with a sale-and-leaseback (SLB) for 12 of the carrier's Airbus A320neos, with the first deliveries in November 2022 and the remainder scheduled for delivery by the end of 2023.

The focus on national airlines continued with another SLB agreed in late 2022 with Saudia Group for 20 A320neos, which will be operated by its low-cost carrier Flyadeal.

At the Paris airshow in June 2023, AviLease signed a deal to add widebody jets to its portfolio for the first time. In an agreement with Irish lessor Avolon covering 13 aircraft, it added two A330neos, along with six A320neos, an A321neo, a Boeing 737 Max 8, plus two older A320 family types.

However, it is the SC acquisition that is transformative and broadcasts AviLease as a serious player on the air finance arena, bringing it a portfolio of 100 narrowbodies and becoming a servicer of another 22 aircraft.

Adding the SC narrowbodies to its existing fleet of 45 aircraft, AviLease has grown to a combined platform of 167 aircraft valued at \$800 million leased to 46 airlines globally. The transaction is expected to close in Q4 2023.

AviLease chairman Fahad Al-Saif said: "The Standard Chartered leasing business is an industry-leading platform combined with a team of high-calibre professionals with an outstanding reputation. This acquisition will propel AviLease and will in turn support Saudi Arabia's aviation ecosystem, on our path to help realize the Saudi Vision 2030's objective of diversifying the economy and adding high value employment opportunities for Saudi citizens."

The chief executive of AviLease is Ted O'Byrne, an aerospace veteran with spells at Airbus and Aercap. His role prior to the Saudi lessor was managing director and co-head of Aviation at the Carlyle Group.

He has been given a clear brief by PIF to put AviLease squarely on the aviation map. "Our goal is to build a sustainable platform which can help build the ecosystem locally, help support local airlines, help work on the local legal and fiscal environment," he said.

"By 2030, we expect to be a 300-plus aircraft fleet with a balance sheet worth about \$20 billion," explained



AviLease CEO Edward O'Byrne (front right) and Standard Chartered's Simon Cooper shake hands on the AviLease's agreement to buy the aircraft leasing portfolio of the SC business.

IMAGE: AVILEASE.

O'Byrne. "How we get there and when we get there is up to us. We have the luxury of having a patient industrial investor behind us."

To achieve this scale, O'Byrne noted that PIF will inject more capital into AviLease; once the SC business is integrated, the firm will seek an investment grade rating.

"We will issue capital in all global markets," said O'Bryne. "Part of our focus is to bring capital inside the country as much as we can."

With the strong orderbooks of Airbus and Boeing, AviLease will look at more SLB deals, the acquisition of aircraft from other lessors, merger and acquisition (M&A) opportunities if companies come on the market, and orders directly with the OEMs.

"These are not in any order," said O'Byrne. "We are looking at every single scenario, constantly arbitraging what is the best deployment of capital – what is the best bang for our buck."

And while no business is immune to risks, aircraft leasing has proved a robust investment over the past few decades. "I think it's important to realise that leasing companies have gone through several crises and absorbed those crises quite well," said O'Byrne, pointing to Covid-19 and the huge losses incurred by airlines in the aftermath of the pandemic. "Meanwhile lessors effectively broke even so it's a fundamentally sound business model."

With the backing of PIF and a positive market outlook, AviLease looks well set to continue its already swift entry to the aircraft leasing game. Few would bet against its achieving its 2030 target and forcing its way into the world's top 10 leasing players.

CATRION: A steadfast partner fuelling Saudi Arabia's Vision 2030



The Kingdom of Saudi Arabia is today a bright spot for the world economy. A renewed sense of optimism is sweeping across the nation as it pivots to a diversified future under the long-term goals of its ambitious Vision 2030.

Seizing opportunities in the vast potential unlocked by the Kingdom's economic and diversification vision, a 42-year-old Saudi Arabian conglomerate has been expanding its operations across sectors and domestic markets to play a pivotal role as a steadfast partner in ushering a new era of development in the Kingdom.

Under its new identity, CATRION, the former Saudi Airlines Catering Company, has embarked on a transformative journey as it evolves into a brand representing Saudi Arabia on the world stage. A key player in the Saudi hospitality and catering sector, for more than four decades the brand energised the catering landscape infusing it with innovation, agility, and an unwavering dedication to excellence.

Operating in 37 airport lounges across Saudi Arabia, CATRION served 2 million guests in 2022, demonstrating a 63% year-on-year increase. With a capacity to produce 27 million meals per year, the company's diverse portfolio in aviation encompasses in-flight services, retail, catering, and facilities management.

Today, a renewed vision of purpose and growth has enveloped the company as it charts a bold new direction, ready to embrace novel opportunities in sectors beyond its core competencies in aviation catering, which currently account for 76 percent of its revenues.

CATRION's ambitious goal, under its new brand identity, is to generate 50% of revenues from diversified, non-aviation ventures, and explore new prospects in highgrowth sectors of healthcare, railways, and integrated facilities management. Through its offerings across sectors, CATRION aims to create a versatile and global brand to fulfil the mandate of Vision 2030 and contribute to the diversification of the Kingdom's economy. CATRION's journey of transformation is also powered by its continuous investments in its people, robust sustainability and ESG practices, long-lasting partnerships, and its dedication to building competencies by leveraging automation and digitalisation as it delivers on its vision to be a proud Saudi Arabia brand for the world.

At the heart of its expansion strategy is a strong commitment to innovation, excellence, and customer satisfaction. This includes a clear focus on developing the next generation of talent in the industry. In a sector that continues to struggle with skills shortage, CATRION has set new industry benchmarks in knowledge sharing

and nurturing talent through programs that support Vision 2030's emphasis on Saudi employment and talent development.

CATRION created over 1,300 new jobs in 2022 with more than 1,000 employees receiving specialised training in 2022 and over 900 to date in 2023. In addition, the CATRION Culinary Academy will provide world-class culinary education to aspiring chefs while around 4,000 student chefs will benefit from upskilling opportunities between 2022 and 2027.

A proudly made-in-Saudi global brand, CATRION is more than a corporate entity. Embodying the spirit of Saudi Arabia's Vision 2030 with its future-forward thinking and innovation, the company is certain to lay a trailblazing path for the international catering industry.





Commited to Care.

catrion.com



AIRPORTS

SUPPORTING THE GROWTH OVERVIEW



A NEW WAVE OF OPPORTUNITY...

Tourism is the new oil for Saudi Arabia and opens up fresh opportunities for the aviation sector in servicing demand from outside its usual visitors.

Tom Batchelor looks at what is in store.

audi Arabia occupies a central location in the Arab and Islamic world, but until recently the kingdom has been largely closed to foreign visitors.

In September 2019, the country of 36 million opened its doors to wide-scale tourism for the first time. It now has ambitions to attract 100 million visitors annually by the end of the decade under the Vision 2030 blueprint to diversify its economy away from oil. New airlines and expanded airports will help facilitate the expected surge in tourism.

Under Vision 2030, Saudi Arabia is undergoing social, political and economic reform, which includes greater global engagement. It has also resulted in a streamlined visa process for foreign nationals: e-visas and visas on arrival are being issued to visitors from dozens of countries

The kingdom is also beginning to invest heavily in initiatives to support and enhance sectors from archaeology and art to music and sport.

One of the cornerstones of this strategy is the development of new attractions and the renovation of existing ones. Saudi Arabia boasts historical treasures such as Al-Ula and Diriyah, which are being restored and opened to visitors. The kingdom currently has six UNESCO World Heritage Sites and hopes to add to this list in the near future.

By the end of the decade, the Saudi leadership wants tourism to account for 10% of the kingdom's GDP. Naif Al-Ghaith, chief economist at Riyad Bank, cited tourism as a factor behind the kingdom's non-oil private sector being on a "steeply upward growth trajectory" at the end of the second quarter of 2023.

Saudi Arabia is also investing heavily in entertainment and cultural events to attract visitors year-round. These range from the Formula 1 Grand Prix in Jeddah to music festivals in Riyadh, which is in the running to be the host city of the World Expo 2030.

In 2020, the country established 11 new cultural commissions to oversee everything from film and music to architecture, libraries and fashion.

Vision 2030's tourism strategy is not just about attracting tourists but also about creating employment opportunities for Saudi youth and encouraging local entrepreneurship in the tourism sector. This comprehensive approach aims to create one million new jobs in the tourism sector over the next seven years.

The massive development under way at Neom in the northwest of the country is another demonstration of the scale of Saudi Arabia's plans to attract inbound tourism. The \$500bn futuristic mega-project, which is seeking to become a destination for luxury and sustainable travel, will feature a 'linear city' named The Line that is slated to one day be home to nine million people. Neom and Volocopter, the urban air mobility developer, have undertaken air taxi test flights, a first in Saudi Arabia, as part of a wider plan to embrace a lower-carbon multimodal transport system in the region.

Saudi Arabia's strengthening aviation sector will support this hoped-for influx. A proposed new airport in Riyadh, for example, is set to be built by the Public Investment Fund (PIF), boosting the capital's position as a logistics and transport hub. Once completed, the King Salman International Airport will be one of the largest in the world. The launch of Riyadh Air also points to the future role of aviation.

By opening up to the world, developing world-class attractions, preserving cultural heritage, and promoting private sector involvement, Saudi Arabia may well be on its way to becoming a global tourist destination. As Fahd Hamidaddin, chief executive of Saudi Tourism Authority, recently commented: "The world in the 1920s came to Saudi Arabia for oil; now the world will come in the 2020s for tourism. Tourism is the new oil."

REACHING FOR THE SKY

If you build it, they will come -

how Saudi Arabia's extensive

airport expansion plans are a

catalyst for economic growth

and global connectivity.

Chloe Greenbank reports.

nation steeped in history and cultural heritage, Saudi Arabia is also a destination where business is booming and billions are being poured into tourism.

In 2022, the World Tourism Council reported that Saudi Arabia had the fastest-growing tourism sector in the Middle East and that by 2025, the country would get around 40% more international visitors than nearby Dubai. Change is afoot as the kingdom sheds its image as a closed-off society; visitors from 49 countries now have easier access, thanks to electronic visas.

Saudi Arabia boasts rich cultural and natural assets, as well as ambitious new tourism projects including The Line in Neom, the pioneering regenerative tourism destination Red Sea Global, and Qiddiya which is billed as

Work is currently ongoing with the development of Riyadh's new air transport hub, King Salman International Airport. It will ultimately replace King Khalid Airport and will serve as a hub for Riyadh Air as well as the kingdom's flag carrier, Saudia. IMAGE: SAUDIA

featuring the world's most innovative and immersive experience.

As the kingdom's population, economy and tourism potential grow, so too does the need for seamless air transportation networks underpinned by modern, efficient airport infrastructure.

Cue Saudi Arabia's Vision 2030 to diversify away from a reliance on oil revenues and for which its aviation strategy is a key element. By developing the kingdom as a global hub connecting the three continents of Asia, Europe and Africa, the strategy aims to triple passenger numbers to 330 million, extend connectivity to more than 250 destinations, and increase air freight capacity to more than 4.5 million tonnes per annum by 2030.

To help meet this demand, a new national carrier, Riyadh Air, is due to start flying in 2025.





CONTINUED FROM PAGE 23

But perhaps most significantly, Saudi Arabia has embarked on a massive undertaking to modernise and expand its airports, aiming to enhance efficiency, accommodate surging passenger numbers and reinforce its position as a regional and international aviation hub.

Yosef Hafiz, vice-president Sales and Marketing at Riyadh-based business jet operator NasJet, explains: "The cities of Riyadh and Jeddah are going to experience mega expansions featuring new international airports, the former with up to six runways. They will house cargo centres, dedicated hangars for commercial and private aviation, alongside new passenger terminals and maintenance, repair and overhaul (MRO) facilities to support the growing demand of commercial and private aviation in Saudi Arabia."

Alongside the development of primary hubs, secondary and regional airports are also undergoing renovations and upgrades. The expansion of airports in cities such as Abha, Taif and Yanbu is geared towards boosting local economies, attracting investment and easing regional travel.

Jeddah Airports Company (JEDCO), as the principal gateway to Mecca, plans to invest \$31 billion to expand King Abdulaziz International Airport, increasing capacity in the new passenger terminal to 114 million per annum.

Meanwhile, in the capital, work is currently ongoing with the development of Riyadh's new air transport hub, King Salman International Airport. It will ultimately replace King Khalid Airport and will serve as a hub for Riyadh Air as well as the kingdom's flag carrier, Saudia.

HRH Mohammed bin Salman bin Abdulaziz, crown prince and prime minister, formally announced the master plan for Riyadh's new airport, which is being funded by the same Public Investment Fund (PIF) that is establishing Riyadh Air, in November, 2022. The airport is expected to contribute 27 million Saudi riyals (\$7.2 million) annually to non-oil GDP and to create 103,000 direct and indirect jobs.

"King Salman International Airport is expected to be one of the world's largest airports," says PIF, "covering an area of approximately 57 sq km, allowing for six parallel runways and including the existing terminals named after King Khalid. It will also include 12 sq km of airport support facilities, residential and recreational facilities, retail outlets and other logistics real estate.

"The airport aims to accommodate up to 120 million travellers by 2030 and 185 million travellers, with the capacity to process 3.5 million tonnes of cargo, by 2050."

With NasJet also operating from the new airport, Hafiz adds that it will feature dedicated business aviation facilities. "Dedicated hangars for business aviation are not something we have right now, but we're really pushing for it as parked aircraft currently sit out on the ramp and in the height of summer are subjected to extreme heat.

24



"We're also keen to see a focus on investment in MRO facilities. Currently, most aircraft are flown overseas for MRO services, often to Dubai, Switzerland or elsewhere in Europe, so there's plenty of opportunity to develop this side of the business locally and by doing so to grow GDP within the country."

King Salman Airport is not alone: it is one of several new airport projects designed to propel the country into rapidly globalising markets.

The Red Sea International Airport in Tabuk, which will feature a seaport as well as runway and helipads, is being designed by architecture firm Foster + Partners - who are also behind the design of the masterplan for King Salman Airport. It is expected to be complete by the end of 2023 and will service one million passengers annually with a peak capacity of 900 passengers per hour by 2030. Operated by DAA International, the airport will limit passenger traffic to one million, based on the environmental carrying capacity of the new Red Sea Global development. The airport will be powered by 100% renewable energy.

"It's a fast-paced project with lots of changes and is part of the overall Vision 2030. It will bring a new dimension to Saudi tourism, which we're delighted to be part of," says Paul O'Donovan, project director of the Red Sea International Project, DAA International.

There's also Neom Bay Airport, which opened in 2019 to serve the \$500bn futuristic mega project of the same name and which is home to Saudi Arabia's new smart city, The Line – a 170km coastal strip, which is intended eventually to house nine million people in interconnected

societies run by artificial intelligence.

Although Neom is still under construction, the airport is already operational, with scheduled commercial flights to Riyadh, Jeddah, Dubai, Dammam and London, primarily catering for those working on the build site. Nadhmi Al-Nasr, chief executive at Neom, describes the airport as "a key enabler of Neom's development, facilitating efficient access to Neom for residents and business partners, and drastically improving the ease with which Neom can connect with people from all over the world".

"This is an exciting step in our journey to provide the best possible air connectivity to Neom and a signal of our rapid growth."

Another big development for Saudi Arabia's airport community was the appointment of a three-year contract by Matarat, the holding company tasked with forging the transformation of the kingdom's airports, to Egis, the French airport operator and engineering firm. It will manage expansion works at 26 Saudi Arabian airports, providing project management and technical support to Matarat's subsidiaries: Riyadh Airport Company, Jeddah Airports, Dammam Airports and Cluster2, which manages the operation of 22 airports.

Jacques Khoriaty, Egis chief commercial officer Middle East and Asia, said: "The Saudi government understands the need to drive aviation and has embarked on various programmes. PIF was involved for instance in acquiring Matarat and giving it the funds to

invest in the kingdom's airports, but also to explore some public-private partnership (PPP) programmes to help improve the overall quality of service and infrastructure."

The Egis team of consultants and engineers brings various skills and expertise to the table having operated airports around the world. Khoriaty said: "Our understanding of air traffic management, having already delivered projects with Saudi Air Navigation Services (SANS), was an added bonus."

The current focus is on establishing a project management office to cover the lifecycle of airport projects with three key focus areas: initial master plans, improving the quality of service while adhering to regulations, and establishing a framework to ensure all airports in the country are managed coherently.

"We will also assist Matarat on the technical side, whether it's a rehabilitation, CAPEX project or a new terminal," said Khoriaty, calling it "a hand-in-hand approach" to supporting Matarat. "The most important step now is to prepare the market for the PPP projects."

For Egis, it's these potential PPP projects with regional airports that are of particular interest, he said. "Regional airports such as Abha in the south, which could grow up to 10 million passengers per year, or Tabuk serving the northwest, fit in well with our existing portfolio of operated airports."

Working closely with both local Saudi Arabian carriers and international airlines is another focus for the work being done to build traffic to and from the kingdom's air transport hubs. Saudi Arabia's air connectivity programme is a

collaboration between Matarat, the general authority of civil aviation (GACA), PIF and the ministry of tourism to assist local carriers in establishing new routes and to showcase Saudi Arabia's modern airport infrastructure and tourism assets to attract international carriers.

"The programme is already reaping rewards," says Khoriaty. "Flynas [Saudi Arabia's low-cost carrier] has opened a new route between Jeddah and Marseille and some of the CIF countries. Saudia has also grown its destination network and Wizz Air has opened a base in Dammam.

"What will boost more traffic is the opening of the first hotels in the Red Sea and the development of AlUla, which is steeped in cultural and historical heritage.

"Egis is currently working on the refurbishment and extension of AlUla airport so that it can cater for increased passenger traffic in the short term, but we are also planning to develop a major new terminal here."

The fact that many of the ongoing airport modernisation projects are being carried out in live airport environments presents its own obstacles, but another challenge is levelling up air traffic management. Khoriaty said: "Because of the drive to push Saudi as a tourism destination and its location at the crossroads of Asia, Europe and Africa, we are starting to see increased activity in Saudi Arabia's airspace. This could cause some serious bottlenecks, so we will work closely with SANS to address this as a lot of the airspace is in restricted military zones."

Improving the quality of service is another area that needs to be addressed, especially when it comes to human resources and training. "But

there's a lot of effort going into improving this to meet different customer expectations," adds Khoriaty. "In terms of diversity and inclusion, we are already seeing an increasing number of women in the industry, especially in the ground handling sector, which is traditionally a maledominated environment. It's definitely moving in the right direction."

Advancements in technology also have a massive role to play in the development of the kingdom's airports with IT provider SITA already appointed by GACA to support airport modernisation.

Hani El Assaad, SITA's president Middle East and Africa, said: "The collaboration between SITA and airports in the kingdom is mainly driven by enhancing the passenger experience throughout their airport journey and driving operational efficiency both landside and airside.

"By providing the latest self-service solutions for passengers and enabling information sharing for both passengers and airlines including for the baggage management process, we are enhancing the passenger journey.

"Meanwhile improving operational efficiency involves providing the right tools for airports to plan resource allocations and flight management and tracking, both for long-term planning and managing special periods such as Hajj season, which brings exceptionally high traffic at King Abdulaziz International Airport in Jeddah."

SITA was also the first to trial a single biometric token journey at King Khalid Airport. El Assaad said: "It has allowed passengers to seamlessly pass through touchpoints using their face as their boarding pass, without the need to present any documents."

The company is also working closely with Red Sea Global on IT solutions for its new air transport hub.

Meanwhile at Nemo Bay, SITA is engaged with the airport on digitalising the passenger journey and providing state-of-the-art solutions for passenger and baggage processing.

"The Saudi aviation market is highly innovative, growing fast and thirsty for unique solutions that can set the scene for the industry in the Middle East region and beyond," said El Assaad. "This aligns well with SITA's strategy of constantly working with early adopters and frontrunners when it comes to technological innovation and creative new solutions."

Smart airports, progressive design and advanced technologies: Saudi Arabia is gaining momentum in its bid to rival the UAE as a regional hub. Pointing to Europe as an example, Egis's Khoriaty believes there is room for both countries to succeed, "to grow their traffic and coexist."

"That's the best outcome, but we will have to wait and see which will dominate as the primary hub for the Middle East."

25

ummer are subjected to extreme heat. | to house nine million people in interconnected | acquiring Matarat and giving it the funds to | Arabia's air connectivity programme is a | comes to human resources and training. "But | hub for the Middle East."



BUSINESS AVIATION

EXPANSION



audi Arabia has always been a leader when it comes to private aviation in the MENA region. But historically it has been "private" in the truest sense. Some of the largest and most luxurious of the world's business jet fleet had found homes in Ieddah and Rivadh.

Today the sector is becoming far more transparent. There's a recognition that achieving the goals of Vision 2030 will need business leaders to travel across the country and beyond in order to successfully develop profitable and effective companies and ventures.

The transparency followed a well-reported crackdown on corruption led by HRH Crown Prince Mohammed bin Salman in 2017. While the immediate effect was to see a disruption in business aircraft sales and a number of aircraft scrapped or handed to the state in settlement, five years on, the industry has stabilised and is now on an upward growth curve.

Operators recognise that the burgeoning segment of business jet operations across Saudi Arabia – and indeed the Middle East region – has gone through significant positive changes during the past few years.

SAUDI FOCUS NOW HAS A PRIVATE EYE

But now, the recognition of the value of private aviation has seen a return to a highly active sector with both private or corporate ownership, and increasingly through charter operations.

At last year's Middle East Business Aviation Association (MEBAA) conference in Dubai, Saudi operators warned that there could even be a shortage of aircraft as the nation's business owners and foreign partners were keen to expand

There is a "burgeoning demand" for domestic and international charter in the kingdom, said Fahad Al Jarboa, chief executive of Saudia Private Aviation (SPA).

Growth in charter operations – almost 16% year on year - has spurred companies like SPA to look at investing in smaller jets such as the new Embraer Praetor 500 in order to meet a changing demand for practical transport that remains secure and, as its name suggests, private.

With such a large country, and with so many

transport scene. Riyadh-based Nasjet has the broadest range of jets in the kingdom and continues to grow.

businesses spreading across its regions,

the need to reach further afield to serve

GCC states and beyond. The \$100bn

reach all parts of the kingdom.

connectivity between more than 30 domestic

airfields within the kingdom is essential, as is

executive and business owner needs across the

investment in aviation and its infrastructure as

part of the Saudi Aviation Strategy is opening

the door for the rewards of business growth to

Smaller jets such as the Cessna Citations –

offered from Riyadh-based Wallan Aviation -

are coming into their own as private aviation

becomes more an integrated part of the air

and the smaller Embraer and Bombardier aircraft

Business aviation manufacturers are still focused on Saudi Arabia. Speaking at the MEBAA show, Renaud Cloâtre, Dassault

Aviation international sales director, said: "Regional transition, as you've seen in Saudi Arabia and the UAE, as well as in other countries, is taking place. When you move towards change, you need the tools for it, and business jets are one of them.

Saudi Arabia has been home to the largest fleet of its Falcon 7X tri-jet and Cloâtre sees potential for the French manufacturer's new models.

can perform - transporting people, goods and materials, or medical evacuation - many things are required in Saudi Arabia. Given the Vision 2030 plan and infrastructure changes in the kingdom, it will be a completely different proposition in years to come. That will give us big development opportunities," he said.

London-based Ionic Aviation reports that Gulfstream represents 29% of the kingdom's installed fleet of 90 aircraft.

Corporate variants of commercial aircraft -Boeing and Airbus – represent more than oneaircraft are based in Riyadh.

Private aviation is a vital part of the whole air transport ecosystem in Saudi Arabia. The sector could not operate without vital ground support. Report by Tom Batchelor.

VISION CREATES OPPORTUNITIES FOR KINGDOM'S FBO GROWTH

aviation terminal at AlUla airfield, IMAGE: EGIS

Saudi aspirations to turn the kingdom into an aviation powerhouse are helping to underpin a Fixed Based Operator (FBO) market that is showing signs of resurgence after taking a knock during the Covid pandemic

There is no shortage of customers seeking to make use of private aviation facilities in the country. Vision 2030 is helping pave the way for an influx of corporate aviation companies and the FBOs to support them, with Saudi Arabia competing with UAE for the largest installed fleet of business jets in the Middle East.

Several FBOs have left the market in recent years after Covid-19 created a challenging environment for operators worldwide.

The kingdom's FBO presence is dominated by two operators which are focused at four major sites around the country: Jeddah, Riyadh, Dammam and Medina.

- ---

The first is Saudia Private Aviation (SPA), a

subsidiary of the Saudia Group, which runs the largest private aviation terminal/FBO in the country. SPA operates at airports serving all four cities, as well as Jizan, Yanbu, and Neom. Its biggest aviation terminal is in Jeddah. where it is headquartered.

SPA recently signed an MoU with Redstar Aviation, paving

the way for ground handling services for medical evacuation flights.

Under the MoU, Redstar Aviation will provide international medical flight services, while SPA will provide ground handling service for its flights in Saudi Arabia. The memorandum is designed to ensure that the process of obtaining a request for medical evacuation services is as smooth as possible.

The FBO has also agreed a deal with Saudi national company LPort, which provides logistical solutions and services to travellers, to streamline boarding procedures for flights. SPA and LPort are also looking at implementing automated systems within airport service facilities to make the process more efficient.

The second major FBO is Jet Aviation, a wholly-owned

subsidiary of General Dynamics. It offers passenge and baggage handling, immigration and customs clearance, transportation, hotel and catering coordination, refuelling, interior and exterior cleaning and turnaround assistance at a range of locations in the kingdom.

Jet Aviation launched a major investment in Rivadh in an effort to boost its FBO facility at King Khaled International Airport in the months prior to the pandemic, just as volumes tailed off.

The FBO has since seen an increase in ground handling volumes at its FBOs in Jeddah, Riyadh and Medina in the post-Covid period.

Other FBOs have been forced to suspend operations in recent years, though there are signs of a resurgence among once-profitable operators. One is NasJet-ExecuJet, which closed its Riyadh FBO during the pandemic but is now looking to resume operations there, as well as in Jeddah and Dammam.

"With the Red Sea projects at AlUla, Amaala and

Neom, these are all airports that I expect will be having significant private aircraft movements due to the projects that are being constructed in those areas." **ExecuJet FBO** regional director Dumani Ndebele said in a recent interview

"There are at least eight airports in Saudi French firm Egis won the contract to develop a private Arabia that you'd need to look at seriously."

Signs of growth are particularly evident in the kingdom's north-west. At AlUla International Airport, French engineering consultancy Egis has won the contract to develop a private aircraft terminal, having already constructed a 3,000 sqm hangar at the site

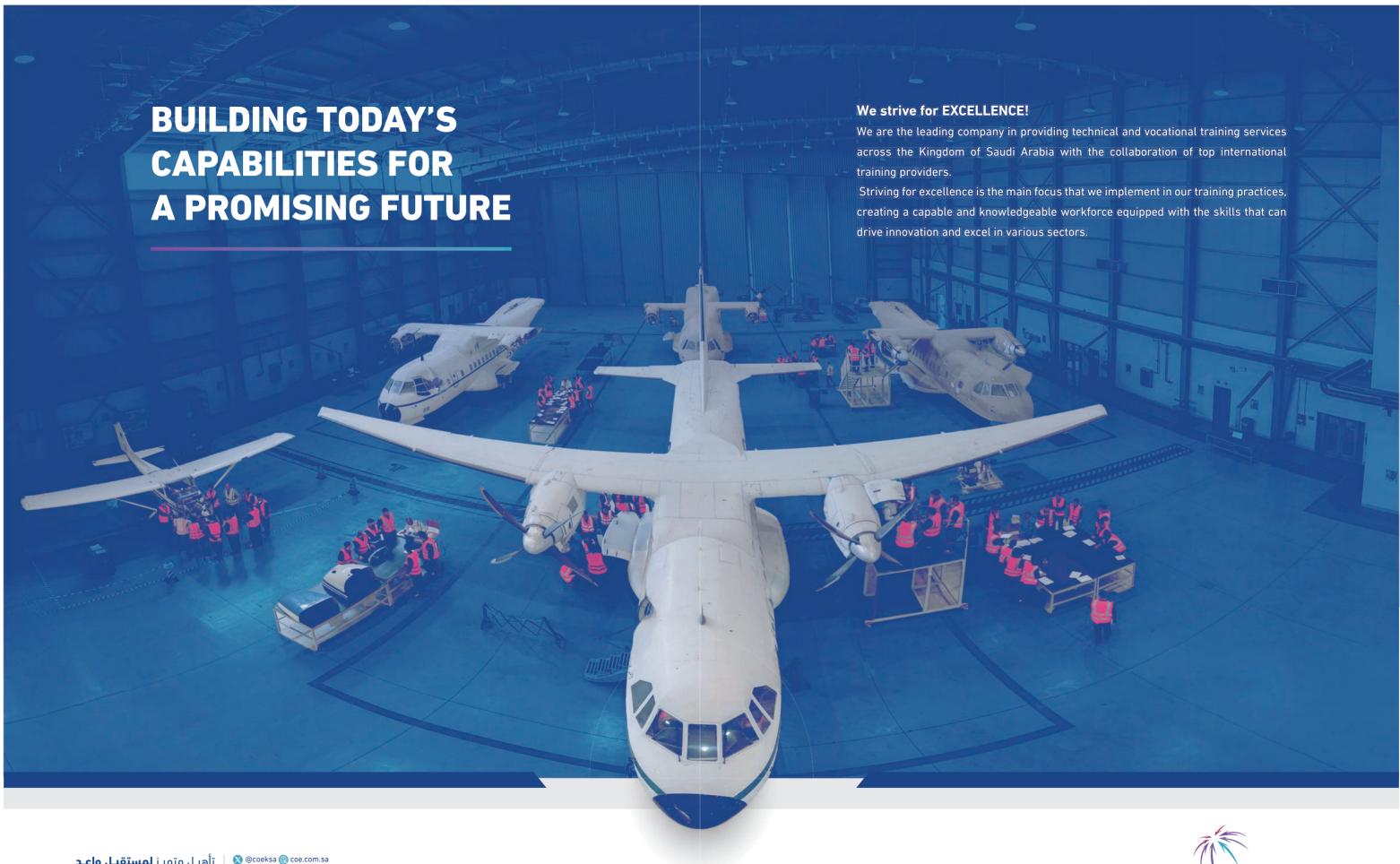
The project is being divided into two components: the expansion of the existing hangar to provide additional storage and maintenance and operations space, and then the development of the new purpose-built FBO terminal building.

Amr Almadani, chief executive of Saudi Arabia's Royal Commission for AlUla, said: "The first and last thing private plane passengers experience during their visit to AlUla is the FBO terminal that will be built to the highest standards as part of our ongoing collaborations with Eqis."

"If you look at all the missions general aviation

The largest Saudi fleet is said to be Gulfstream:

such as the BBI and ACIs manufactured by third of the entire base. Almost two-thirds of



Top of the form: OxfordSaudia is the countru's largest flight school and second largest in the Middle East.

Why Saudi needs to catch the high-speed train

Training is a vital cog in Saudi Arabia's Vision 2030 plan for civil aviation.

Maximilian Buerger,

managing director of AFM and Aviationfly, looks at how the Kingdom is stepping up its activities.

■ Maximilian Buerger is the Managing Director of AFM (www.afm.aero) an industry leading market intelligence platform for the pilot training industry – studying the demand and supply dynamics for pilots and working with aviation industry stakeholders on growing and enhancing pilot training operations. AFM currently supports a number of different Saudi aviation and pilot training industry stakeholders, has been studying the market for over six years and is keen to support the development of the domestic pilot training infrastructure in the Kingdom.

audi Arabia has set a goal, as part of its Vision 2030 plan, to become one of the top global tourism destinations by 2030, welcoming 100 million visitors annually. To achieve this ambitious vision will require significant growth in air connectivity and the Kingdom's airlines, resulting in a steep increase in demand for qualified aviation personnel and their training.

In 2023 the airlines have shown their intention to meet this growth with announcements such as the launch of a second flag carrier, Riyadh Air, which placed a firm order for 39 Boeing B787s plus 33 options. It will start operations in 2025 and seeks to hire 700 pilots over the next three years.

Another announcement signalling aircraft fleet growth came from Jeddah-based flag carrier Saudia which announced in March that it had ordered a further 39 Boeing B787s with options for 10 more.

On the narrowbody side, the operators are also planning for huge fleet growth with fast-growing low-cost carrier Flynas increasing its total firm orders to 120 Airbus A320s, with plans to increase this to 250.

As airlines in Saudi Arabia plan for significant fleet expansion, the question becomes who will fly and maintain this fast-growing fleet?

To meet this growing demand for qualified aviation personnel, the Kingdom has seen a significant development in the aviation training infrastructure over the last three years with the launch of a number of new organisations as well as significant investment into expanding existing training infrastructure.

Saudi Arabia's training infrastructure has a long history, with the oldest aviation training organisation, Prince Sultan Aviation Academy (PSAA), having been established in 1959 when it was known as Saudia Pilot Training School Today this Jeddah-based academy is the Kingdom's leading aviation training hub, conducting a wide range of courses to train pilots, aircraft maintenance technicians, cabin crew, ground operations staff and much more.

Even during the challenging pandemic years, PSAA planned for the future and placed an order for six additional simulators from global aviation solution provider L3Harris. Its existing full-flight simulator training infrastructure for pilots is one of the largest in the region and is certified by the Kingdom's aviation regulator, General Authority of Civil Aviation (GACA). It also holds certification from the on Page 32

European Union Aviation Safety



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Lufthansa Consulting

CONTINUED FROM PAGE 31

Agency (EASA) for a number of its simulators.

The training of new pilots has historically been conducted mostly outside the Kingdom, but this segment of the industry has also seen significant developments over the last three years with large-scale investment into developing the Kingdom's own flight training organisations.

Saudi Arabia's longest-established flight school is AeroGuard Arabia, previously known as Rabigh Wings Aviation Academy. Located in the west of the Kingdom, in 2022 it announced plans to partner with global pilot training group AeroGuard Flight Training Center, based in Phoenix, Arizona, specifically to focus on providing world-class training for new pilots for the growing airlines.

Since the launch of this partnership, the flight school has expanded its training capacity, focussed on optimising its training to the demands of airlines within Saudi Arabia, and starting offering a programme where aspiring pilots could get both a Saudi (GACA) and American (FAA) licence.

Another legacy flight training organisation driving expansion in the general aviation and pilot training infrastructure in the Kingdom is the Saudi Aviation Club (SAC). A nonprofit entity with its main base at Thumamah airport, about 60km north of Riyadh, it promotes aeronautical sciences and encourages the practice of aviation activities in Saudi Arabia.

On the east coast, Damman saw the opening of OxfordSaudia, the country's largest flight school and second largest in the Middle East with more than 24 aircraft and ambitions to train hundreds of both Saudi and international pilots. OxfordSaudia celebrated the graduation of its first batch of pilots in August 2023, is hirring more instructors to increase its training operations, and is introducing additional training aircraft with the latest being two Extra 300 aerobatic trainers – the first to be used by a flight school in the Kingdom.

The latest flight school to launch in Saudi Arabia is Riyadh-based Tayaran, the National Aviation Academy. It has partnered with two well-known international aviation organisations: BAE Systems SDT, for aircraft maintenance training; and IFTC, the Turkish advanced pilot training (flight simulator training) group for an Airbus A320 full-flight simulator training centre.

Tarayan, like SAC, is based at Thumamah airport, which is ideal for individuals living in Riyadh.

All three flight training organisations – AeroGuard Arabia, OxfordSaudia and Tayaran-currently offer programmes leading to employment of their graduates as flight instructors, signalling their desire to expand to meet the growing demand from airlines.

But is the existing pilot training infrastructure enough to meet the demand of the airlines? A number of announcements and indicators signal that more is needed.



CLASS ACT: Prince
Sultan Aviation
Academy (PSAA) is
the Kingdom's leading
aviation training hub,
conducting a wide
range of courses to
train pilots, aircraft
maintenance
technicians, cabin
crew, ground
operations staff and
much more.

THE ACADEMY VIEW

We asked the leading Saudi Arabian aviation academy how it sees the future for the training industry in the Kingdom in line with the aviation strategy and Vision 2030.

Captain Ismael Koshy (right) is the Managing Director of Prince Sultan Aviation Academy (PSAA) – currently the country's only full flight simulator training centre.

"The PSAA team anticipated, over a couple of years ago, a real jump in Saudi Arabia and in the Middle East in the aviation sector once the pandemic is over, and we knew it was coming. "We were optimistic about it in terms of number of pilots to be trained in the future. Nevertheless, this is a real challenge and we have now a great deal of work ahead of us.

"In recent years, the academy has been increasing the types of training we offer. We are building our offerings and ramping up our programme in order to lead the Middle East and North Africa in the aviation training industry.

"In order to support the pilot demand with new airlines starting in Kingdom and in the region, we are currently investing in new training equipment by installing additional A320neo Full Flight Simulators, and Flight Training devices in our facility in Jeddah, as we aim to attract a broader range of pilot trainees.

"Our vision is to become a centre of aviation knowledge in the Middle East and North Africa region, enhancing the academy's standards and supporting the government's Vision 2030." In July 2023, Riyadh Air announced the signing of an memorandum of understanding (MoU) with Prince Sultan University for both a graduate programme and a simulator training centre for aviation personnel, to be built on the university's campus in Riyadh. Enhancing such partnerships between airlines and training organisations would lead to a rapid expansion of the Kingdom's training industry and, most importantly, provide young people with a clear career path – especially important for costly education such as pilot training.

While an increasing number of foreign pilot training organisations market their courses to Saudi airlines and aspiring pilots, it is important for Saudi airlines to support the emerging domestic pilot training infrastructure as it aims to scale at a rate not seen before in the Middle East and deliver in terms of training quality and performance to meet domestic demand.

The coming 12 to 24 months will likely see an increasing number of announcements of such partnerships as well as additional investment into expanding the training infrastructure, whether trainers or simulators.

Just as Vision 2030 sets out a clear target for the number of annual visitors, the Saudi pilot training industry could come together to set a similar target for domestic training of pilots. Ideally the different stakeholders – airline operators and GACA – would support such an ambition.

EMPOWERING WOMEN IN AVIATION

Saudi Arabia's Colleges of Excellence and Riyadh Air are joining forces in the first training programme for Saudi women in aircraft maintenance and engineering.

Breaking down gender barriers is key to Vision 2030's economic diversification goals. In Saudi Arabia's aviation sector, great strides have been made to encourage and support women's participation in many roles.

These initiatives include a recent collaboration between the Colleges of Excellence (CoE) which has facilities across the kingdom including its International Aviation Technical College (IATC) at Riyadh, and newly established Saudi carrier Riyadh Air.

The two organisations agreed to facilitate the training and skills enhancement of all Saudi talent in the aviation industry under a Memorandum of Understanding (MoU) signed in August by Ayman Mustafa Alabdullah, chief executive of CoE, and Tony Douglas, Riyadh Air's chief executive.

Established in 2014, CoE provides technical and vocational services tailored to the needs of employers across different sectors. Under the deal with Riyadh Air, it will work alongside the carrier to develop and implement a training programme for Saudi talent, which will include specialised courses, sponsorship and mentoring for young women, as well as men, pursuing careers in aviation. The agreement marks the first training programme for Saudi women in aircraft maintenance and engineering.

Alabdullah said: "We have already started recruiting for our

first batch of female trainees to join the training programmes on behalf of Riyadh Air in January and we expect to have more trainees over time.

"It's about understanding the sector's human resource needs and localising skills," he added. "We are supporting Saudi's future workforce by providing them with training and working with companies to ensure there are employment opportunities awaiting them when they graduate."

According to Alabdullah, there are more than 4500 trainees at IATC and 85% are sponsored by government entities or companies in the private sector. "Our graduates have reached more than 6000 and our job placement rate is more than 90% after graduation," he said.

"To support Vision 2030's aims for Saudi to be a transport and logistics hub for the region, we are making sure the industry has the highest calibre of graduates, both male and female, to choose from, by providing the right training for aviation's future workforce," concluded Alabdullah.

Ayman Mustafa
Alabdullah:
"We have already
started
recruiting for
our first batch
of female
trainees to join
the training
programmes on
behalf of
Riyadh Air in
January."
IMAGE: COE





The helicopter market looks set to grow in the Kingdom as civil operators recognise the benefits of rotorcraft in a variety of missions away from their traditional military and petrochemical roles. A joint venture to produce helicopters in-country can only help this expansion. Jon Lake reports.

arlier this summer, Saudi defence company SCOPA Industries and Airbus signed an agreement to jointly produce more than 100 civil and military H175 helicopters worth €6bn and creating 8,500 jobs in the Kingdom. The deal was announced during a Saudi-French investment forum that was held while Saudi Arabia's Crown Prince, Mohammed bin Salman, was visiting France.

The forum declared its purpose was to "address key issues across an array of sectors to create visibility for new investment opportunities for technology startups and entrepreneurship", exploring new opportunities and strengthening bilateral ties.

SCOPA chief executive Fawaz Alakeel said the first helicopters produced by the new joint SCOPA and Airbus factories in Saudi Arabia

would be seen within two years of February 2024's World Defense Show, where the "foundation stone" for the project would be laid.

No details have been given as to the split between civil and military variants, but it would seem likely that they will predominantly consist of military rotorcraft.

Saudi military forces already operate more than 250 helicopters, while government ministries operate 50 more. This compares to about 50 helicopters with The Helicopter Company (THC) and Aramco.

The Royal Saudi Air Force (RSAF or Al Quwwat al Jawwiya al Malakiah as Sa'udiya) fields about 36 Bell 212/412s, 13 H215M/AS332/532 Super Pumas (with three more on order), and a pair of S-70/UH-60Ls.

The Royal Saudi Land Forces (RSLF, Al-Jaysh Al-Araby al-Saudi) has 22 AH-64A/D/E Apache attack helicopters (with 25 more on order), and eight CH-47F Chinooks (and 40 more on order), 15 OH-58s and 43 S-70/i/UH-60L/M Black Hawks (with 57 more on order).

The Royal Saudi Navy (RSN, Al-Ouwwat al-Bahriyah al-Arabiyah as-Su'udiyah) has 26 AS365/565 Dauphin/Panthers, 20 H215M/AS332/532 Super Pumas and 10 MH-60Rs, with 10 NH90 (NFH) on order.

The Saudi Arabia National Guard (Alaras Al-Wa an) operates 12 AH-64E Apache Guardians (with 24 more on order), 35 Boeing AH-6i Little Birds (plus 24 on order) and 24 S-70/HH/UH-60M Black Hawks (with 148 more on order). Also on order are 12 NH90s (TTH).

The Saudi Geological Survey has a single Bell 429, while the Saudi Ministry of Defense operates two AW101 Mk.640s, and seven AW139s. The Saudi Ministry of Interior has 16 S-92s, 15 S-76s and nine Schweizer 434s, as well as an H145, and two AS332L2 Super Pumas.

The use of civil helicopters in Saudi Arabia has been limited for many years. Until recently, the extreme heat of summer and high elevations encountered in the Kingdom have restricted operations by any but the highest-performance helicopter models. Saudia, formerly Saudi Arabian Airlines, briefly used a Westland Whirlwind from November 1956, but generally helicopters within the Kingdom were operated by the government or government-owned entities, including Saudi Aramco, the Saudi Arabian Oil Group, a public petroleum and natural gas company originally known as the Arabian American Oil Company

This has started to change with the Vision 2030 strategy, which has seen the privatisation of most

government operations, and a diversification of the Kingdom's economy away from oil, though helicopter use remains relatively limited.

Historically, helicopter markets have often been 'kick-started' by the offshore oil and gas industry, with helicopters proving essential for supplying rigs, and moving personnel on and off them.

But while the Safaniya oil field in the Arabian Gulf in Saudi Arabia is the world's biggest conventional offshore oil field in terms of production capacity and recoverable reserves. there are just 14 offshore rigs, most within about 150km of the Saudi coast. By comparison, the North Sea accommodates 184 rigs.

Analysts differ in their assessment of the Saudi helicopter market's likely future. One recent report suggested that the Saudi Arabian helicopter market was "expected to grow during 2023-2028," while another concluded that after two consecutive years of growth (which followed five years of decline), the helicopter market was "expected to start a downward consumption trend over the next eight years."

In other helicopter markets, growth is often driven by increasing demand for emergency medical services, VIP and corporate transport, powerline inspection, underslung loads, and tourism, some of which could impact the Saudi rotorcraft market.

Helicopter emergency medical services (HEMS) in Saudi Arabia date back to 2009, when the Saudi Red Crescent Authority (SRCA) contracted Action Aviation, a British company, to run the Saudi Air Ambulance service with six MD Explorer helicopters based in Riyadh Province. Subsequently, the service was provided by Abu Dhabi Aviation and then by Petroleum Helicopters International (PHI), using Bell 412s and operating from Ha'il, Jeddah, Mecca, Medina, Qassim and Riyadh. These were manned by a crew of pilot, co-pilot, medic, and a Saudi doctor, who also acted as interpreter.

A Sikorsky S-92 in action with

the Saudi Interior Ministru.

From 2016, when PHI closed down its HEMS operation in Saudi Arabia, there was no commercial HEMS response service in the entire Kingdom, apart from transfers from outlying rural facilities to tertiary care facilities using fixed-wing aircraft. Thereafter, Alpha Star Air Ambulance (which operates mainly fixed-wing aircraft) became the only commercial HEMS provider in the Kingdom. The company's commercial HEMS programme is a partnership between Alpha Star and THC. Alpha Star provides the medical crews, while THC owns and operates the aircraft. Both companies are owned by the KSA Public Investment Firm.

The new Saudi Air Ambulance service will operate from 23 bases, covering 90% of the population, and will be operated in partnership with the Saudi Red Crescent Authority. The service will start off with daytime operations but will eventually operate at night using night vision goggles.

The service will include establishing the first commercial HEMS aircraft operating in Neom, the 'cognitive and smart city' announced in 2017. A Leonardo AW139 began providing a commercial HEMS response and transport service for the NEOM Project in September 2021. This was the first commercial HEMS aircraft in the Kingdom operated by a Saudi operator.

on Page 36



CONTINUED FROM PAGE 35

Though Saudi Arabia is home to a growing population of exactly the kind of high net worth individuals (HNWIs) and corporations who would normally be expected to use VIP and corporate helicopters, this market remains largely untapped, as does the potentially lucrative tourist market, which could stimulate demand for helicopter air taxi and charter services.

But for now, there are more factors damping down demand than stimulating it. The ongoing conflicts in Yemen and Syria have resulted in some disruption to the aviation industry, locally, and to MRO services, limiting the potential market growth. The uncertainty caused by political and economic instability will always tend to depress demand for these kinds of services, even though Saudi Arabia's burgeoning tourist industry will eventually stimulate it.

For now, there are two principal 'civil' helicopter operators in the Kingdom.

The longest-serving of these is Aramco, whose aviation division is now its wholly owned subsidiary Mukamalah Aviation Company Ltd. As Saudi Aramco Aviation, it was established in 1934 as the first aviation company in Saudi Arabia and the second in the Middle East. It was tasked with supporting oil exploration throughout the vast Saudi desert, although between 1947 and 1961 it operated as a transatlantic airline, using three Douglas DC-4s (later DC-6Bs) to make 2,400 Atlantic crossings!

For its core role in the oil industry, it flew Douglas DC-3s and de Havilland Canada DHC-2 Beavers, later adding Fokker F27s, a DHC-6 Twin Otter and Bell 47 helicopters.

The Aramco aviation division acquired AW109 light twins in 2006, and started operating AW139s in 2008, using both types primarily to undertake offshore transport missions in support of the oil and gas industry. The AW139 proved ideally suited for Aramco's operations, with outstanding hot-and-high performance, ample cabin space, and excellent navigation aids.

From 2016, Aramco began working with Dublin-based Milestone Aviation Group, which describes itself as "the global leader in helicopter leasing." Aramco initially leased three AW139s from Milestone.

Khalid Al-Natour, the then-head of Aramco Aviation, said later that the leasing model "has been tremendously successful for Aramco as it has allowed us to focus on our operational excellence while de-risking asset ownership and depreciation costs. We know we can rely on Milestone, and we look forward to working together."

After a competitive tender process, Aramco awarded its medium and light twin fleet renewal contract to Milestone in 2018, with aircraft deliveries spread over a multi-year period. Michael York, head of Emerging Markets at Milestone Aviation, said: "Aramco has pioneered offshore oil and gas helicopter operations in the Middle East for



decades and we are honoured to support Aramco as their trusted leasing partner, as they continue to expand and modernise their fleet."

The fleet renewal programme saw 16 inservice AugustaWestland AW139s being replaced by new, second-generation models from 2018, while the five AW109s were replaced by the newest variant of the Airbus H145T2 from 2019, bringing a new level of capability to the lighter end of the fleet, and allowing Aramco to take on new missions.

Claire Brugirard, Milestone's vice-president Commercial for Africa and the Middle East, said: "We are extremely grateful for the trust placed in our services and for the excellent collaboration with Aramco. Thanks to our financial strength and technical expertise, our team was able to continue deliveries throughout the Covid-19 pandemic, overcoming some of the most challenging circumstances. Aramco's commitment to this fleet renewal programme is a testament to the benefits of leasing and we are incredibly proud to support them in their oil and gas missions across Saudi Arabia."

Aramco's aviation department was spun off and rebranded in May 2023, being privatised and transformed into an independent company as Mukamalah Aviation (Dammam). The department became a separate entity (without changes to staff and quality of service) in an effort to boost efficiency, while continuing to provide flight services to Aramco. The company hoped to "increase operational efficiency and improve the Kingdom's corporate aviation and logistics sector in line with Vision 2030."

In June 2023, the new entity celebrated a major achievement for its AW139 intermediate twin engine helicopter fleet, setting a 200,000 flight hours milestone. Mukamalah chief

executive Khalid Alnatour said: "As the leading corporate operator, Mukamalah is proud to be the first helicopter operator in the MENA region to achieve this significant milestone. This success would not be possible without our strong partnership with Leonardo Helicopters."

Gian Piero Cutillo, Leonardo Helicopters' managing director, responded by saying: "We congratulate our partner Mukamalah Aviation company for this amazing operational milestone. This has been set thanks to a unique combination of outstanding professional skills and expertise in top class helicopter services at Mukamalah and the unmatched capabilities and technologies embedded into our AW139. We're glad to be part of their success delivering critical support to the energy industry and the national community and we're committed to sustaining Mukamalah to reach greater and greater operational goals with their AW139s in the future."

Today, headquartered in Dammam, Mukamalah Aviation has 15,000 sqm of hangarage at Dammam, Ras Tanura, and Tanajib, and regularly serves 18 airports across Saudi Arabia, nine of which are fully managed, and operated by Mukamalah. The company also operated from more than 300 helipads, both on and offshore.

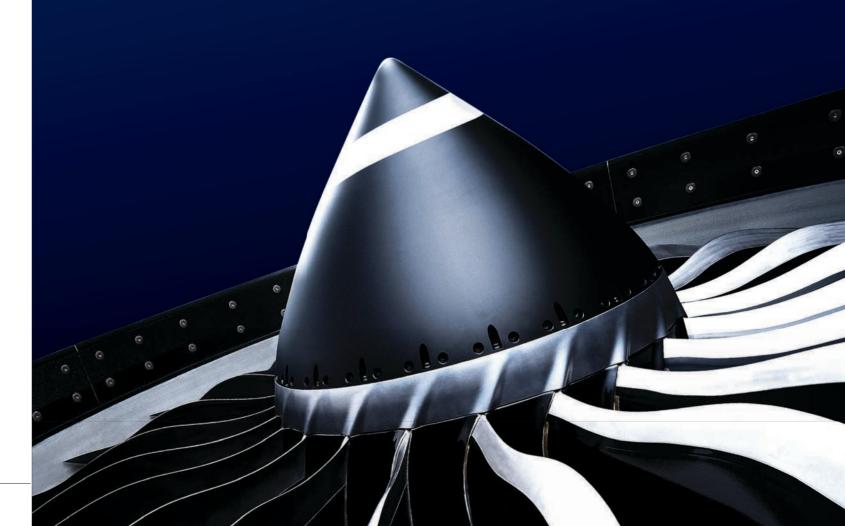
The company operates a fleet of seven B737-800s and one B767-200ER, two Hawker Beechcraft 900XPs, three Beechcraft King Air 350s, and three Air Tractor AT-802s for oil spill response, spraying and firefighting missions. Its single BAe 146, three Dash 8-200s and three Embraer 170s have been withdrawn.

The rotary wing fleet consists of 24 Leonardo AW139s (with three more due this year), five Airbus Helicopters H145s and two Bell 505 Jet Ranger Xs for pilot training, though it has been reported that three further AW139s and two more H145s have been acquired, taking the total Aramco/Mukamalah helicopter fleet on lease from Milestone to 35 helicopters.



The future is our starting point

Every day, we're working to help move the world forward. Today, and for generations to come. The future of flight starts now.





THC PROFILE





THE ROTARY CLUB

Jon Lake meets The Helicopter Company (THC) which plays a key role at the heart of Saudi Arabia's burgeoning rotary wing industry.

The Helicopter Company of Saudi Arabia (THC) is the kingdom's first and only Saudi-owned independent commercial helicopter operator. Wholly-owned by the Saudi Public Investment Fund (PIF), it was set up in 2018 and has been operating since mid-2019.

THC was established as part of the PIF's strategy to meet the growing demand for commercial helicopters in Saudi Arabia, supporting Saudi Vision 2030 and generating long-term commercial returns.

"When we first started out in 2018, THC's focus was charter work, said chief executive Capt Arnauld Martinez. "We believed it served a broader market, especially important to us at the beginning phase of the company and with the context of establishing a new industry in the kingdom. Since then, we have broadened our range of services with tourism increasingly becoming a key offering and one that is now a crucial part of future plans.

"THC enriches the kingdom's tourism sector through the services we provide as part of our partnership with the Royal Commission for AlUla (RCU). This partnership started in 2019, with tour operations kicking off in 2021 for year-round scenic tours to explore the kingdom. This is a service that is provided by RCU Tourism and is enabled by THC's fleet.

"THC's contributions to Saudi Arabia's giga projects has enabled us to increasingly contribute to the tourism sector in the kingdom. We look forward to building on these initiatives.

"Moreover, THC has played a pivotal role in supporting high-profile local events in Saudi Arabia, such as Formula 1, Formula E, Mdl Beast and Rally Dakar. In so doing, THC bolsters the rotor and general aviation sector and contributes to the growth of sports, tourism and cultural industries in alignment with Vision 2030."

In March 2019, the company displayed a Leonardo AW139 carrying the company's titles at the Saudi International Exhibition at Al-Thumama, though the helicopter had actually been loaned by Malaysia's Weststar Aviation, and was used for promotional purposes before the company's own fleet was delivered.

THC received its Air Operator's Certificate (AOC) from the Saudi General Authority for Civil Aviation (GACA) in July 2019 and took delivery of the first of an initial pair of AW139s that September.

It became a Platinum sponsor of the Dubai airshow that year, thereby gaining useful brand exposure and a showcase for its services.

The company began initial operations in late 2019, and pursued an ambitious growth strategy, planning to expand the geographic scope of its services from Riyadh, Makkah, Madinah and Tabuk, to cover all of the kingdom's regions.

The AW139 was an obvious choice for THC,

already widely used and understood in the region, with good MRO provision and a large pool of qualified aircrew and engineers. The company's AW139 fleet was carefully selected to provide a variety of cabin configurations, including 5-7 seat VVIP fits, 8-12 seat corporate interiors, and a utility fit seating up to 14 passengers. In the EMS role, up to three stretchers could be carried. But the company soon looked beyond the AW139.

The AW139s were thus augmented by smaller Airbus H125s, and twin-engined, nine-seat H145s. Capt Martinez said: "The H125 is light, flexible and durable and its single engine enables THC to conduct operations such as lifting and filming. THC utilizes the aircraft in services related to scenic tourism and aerial work such as filming, banner towing, and surveying."

The H145 was selected for EMS services, alongside the AW139, as THC seeks to ensure a diverse fleet for its many clients, with the company prizing the H145's ability to withstand harsh weather conditions.

"What sets THC apart is its commitment to strategic growth, aiming to oversee a fleet exceeding 100 aircraft by the end of 2026," said Capt Martinez. "However, THC maintains a pragmatic approach, only bringing helicopters on board when there is a genuine demand. In fact, 80% of THC's fleet is under contract, reflecting our dedication to efficient and purpose-driven operations."

By the end of 2022, the THC fleet totalled 29 helicopters, consisting of 14 Leonardo AW139s, 10 Airbus H125s, and five H145s. The fleet will stand 47 helicopters by the end of 2023 – with



23 AW139s, 11 H125s, 12 H145s and the first H160. At least 18 additional aircraft will be delivered during 2024, including one more H125, eight H145s, five AW139s and four more H160s, taking the fleet to 65 aircraft!

"In March 2023, we celebrated the first delivery of an ACH160 helicopter, Airbus's most technologically-advanced model," said Capt Martinez. "As an operator, we are ready to embrace innovation and a greener platform with less noise and advanced safety features that do not exist on other platforms.

"THC recognized, from an early stage, the benefits of the new state-of-the-art ACH160 and the services it could enable the company to deliver. THC is currently working alongside Red Sea Global, an entity responsible for two of Saudi Arabia's largest regenerative tourism projects on its western coast – the Red Sea and Amaala developments."

The fleet expansion has required a significant recruiting and training effort for both pilots and engineers. To be able to recruit and retain talent, THC invests in a comprehensive human capital programme, ensuring that it provides ample

opportunities for Saudi nationals to be part of the company, now and in the future. "At present THC champions localization by maintaining an impressive Saudization rate that is more than 50%," Arnauld Martinez says.

"Additionally, THC actively trains and nurtures aviation expertise among its workforce and local talent through specialised programmes such as Qimam Flight for pilots, Qimam Technical and PIF's graduate development programme. The 'Qimam' programme was implemented during 2022, as a cadet programme for Saudi nationals to train as pilots and engineers, before serving with THC."

The company would continue to expand the kingdom's aviation-based EMS capabilities for many years to come, as part of a growing helicopter ecosystem in Saudi Arabia.

"As it stands, EMS is currently one of THC's largest projects in our portfolio. THC's biggest strategic objective is to make a positive impact in Saudi Arabia, and one of the key ways it hopes to achieve this is by saving lives.

"To fulfil this mission, THC has placed a particular focus on delivering cutting-edge

Above: The H145 was selected for EMS services due to its ability to withstand harsh weather conditions.

Left: The ACH160 helicopter is Airbus's most technologically advanced model.

emergency medical services in the kingdom. Given the vast size of Saudi Arabia, THC's objective is to ensure immediate and efficient emergency response coverage within this extensive area.

"To achieve this, the Helicopter Emergency Medical Services (HEMS) programme that is operated by THC in partnership with the Saudi Red Crescent Authority (SRCA) now has nine bases and 11 aircraft, which it intends to grow to 23 bases and 30 aircraft by the end of 2026.

"THC currently provides a range of services including construction, filmography, surveying, private charters, emergency medical services (EMS) and tourism. As Saudi Arabia advances with its diversification plans, we intend to advance into new sectors whilst supporting Vision 2030.

"THC is also currently growing our range of services into the domains of hospitality, tourism and aerial work.

"As the kingdom's exciting new giga-projects begin to come online, there will be a naturally evolving tourism and charter sector to roll out and this will also stretch to urban air mobility services, be it with helicopters in the near term or evolving technologies into the future. A helicopter-based service to complement Hajj and Umrah is also top of our agenda.

"This evolution is in line with Saudi's diversification plans and signifies our commitment to actively contribute to the broader general aviation sector within the kingdom."









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GROWTH BEST PRACTICE

Modernisation, innovations such as remote air traffic control systems, and international partnerships help give Saudi Arabia's air navigation service confidence in facing the growing demands on Saudi Arabia's airspace. **Tom Batchelor** reports.

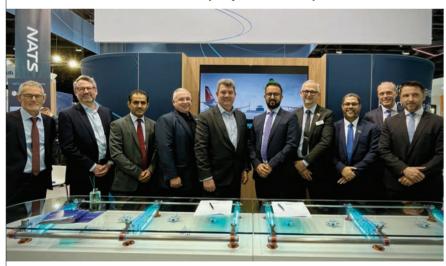
HOW SANS NAVIGATES THE CHALLENGES OF CHANGE

audi Air Navigation Services (SANS) plays a vital role in air traffic management (ATM) within more than two million sq km of increasingly crowded Saudi Arabian airspace, as well as across the kingdom's expanding airport network.

The challenge of providing efficient ATM has taken on extra importance in recent years, with Saudi air traffic entering a period of sustained growth. Flight movements increased 26% to 403,223 in the first half of 2023, including 305,156 arrivals and departures and 98,067 over-flights

SANS is also having to adapt to the requirements of new airspace entrants, such as drones and electric vertical takeoff and landing (eVTOL) aircraft.

The development of new airports under the Vision 2030 programme is placing additional responsibilities on SANS. The provider supplied and installed navigational systems at Neom Bay Airport within 77 days in 2021, and it has



WORKING TOGETHER:
NATS chief executive Martin
Rolfe (centre left) and his
SANS counterpart, Abdulaziz
Salem Alzaid (centre right),
sign the agreement at CANSO
Airspace World.
IMAGE NATS

implemented navigation systems projects for other airports in the region.

Commenting on Saudi Arabia's rapid expansion in air connectivity, Abdulaziz bin Salem Al-Zaid, chief executive of SANS, said: "The aviation sector in the kingdom is witnessing rapid growth, coinciding with the launch of many ambitious transformation programmes that keep pace with the aspirations of the vision and the objectives of the national strategy for the aviation sector."

SANS is harnessing cutting-edge technologies to optimise use of existing airspace and ground-based infrastructure, and achieve the kingdom's growth ambitions. Over the summer of 2023, AlUla International Airport became the first in the Middle East to announce a

switch to a virtual air traffic control (ATC) tower with controllers relocated to a central command station in Jeddah.

The remote ATC operation at AlUla, implemented by Spanish company Indra, is expected to become fully operational in early 2024. Javier Ruano, Indra's director of ATM operations, said: "We're redoubling our efforts to make the Saudi service provider one of the world leaders in air traffic management and to equip the country with the most advanced infrastructure."

Al-Zaid added: "This project will constitute a qualitative leap for the navigation services provided by SANS and enhance its position as one of the operators that manages its airspace in accordance with the most demanding international safety and quality standards."

At the crossroads of Asia, Africa, and Europe, Saudi airspace is strategically important on the international stage, and SANS is playing its part in supporting ATM both at home and abroad. The organisation has signed a commercial cooperation agreement with French company Thales to develop an ATM maintenance management system.

Under the agreement, SANS will develop the technical elements of the programme, while Thales will ensure the commercial and marketing objectives are met. The intention is to contribute to the development of air navigation systems worldwide.

Meanwhile in March 2023, the Saudi air navigation service provider signed a memorandum of understanding (MoU) with its British counterpart, NATS. The partnership "signals the shared intent of both organisations to pursue future opportunities, focused on a sustainable approach to efficiently maximising capacity and managing ATM across the kingdom of Saudi Arabia," SANS said.

Martin Rolfe, NATS chief executive officer, added: "The kingdom of Saudi Arabia has hugely exciting and ambitious plans for its aviation sector. Over the next decade it plans to create new airports, airspace, airlines and infrastructure to increase their passenger numbers to at least 300 million a year.

"The kingdom's bold and ambitious programme shows how aviation is a fundamental economic catalyst for broader prosperity and we look forward to working with SANS to help bring that vision to life."

The agreement is in addition to a regulator-to-regulator partnership between the Saudi General Authority of Civil Aviation (GACA) and UK's CAA International (CAAi), to enhance the kingdom's aviation safety regulatory frameworks.

GACA's safety thirst

he General Authority of Civil Aviation (GACA) of Saudi Arabia has been a leader across the Middle Saudi Arabia has an enviable record for ■ East for many years. But as the kingdom steps up its preparations to move aviation safety and a Vision 2030 to a reality, it is ensuring it is prepared for that good reputation for growth with a world-class state safety programme in place. GACA signed a cooperation partnership in early 2023 its oversight and with CAA International (CAAi), part of the UK Civil Aviation Authority (CAA), to work together on ensuring regulatory practices. targets will be met. But with the aviation This project builds on an MoU signed in 2018 between the CAA and GACA on civil aviation technical cooperation strategy aligned to and subsequent projects on economic regulation and air Vision 2030 navigation service oversight. promising capacity

growth, the kingdom

decided to assess and

enhance its aviation

safety regulatory

with global best

Alan Peaford

practice.

reports.

Rob Erskine:

around raising

"This is all

standards,

updating the

standards to

increase that

even higher

levels."

IMAGE: CAAI

performance to

frameworks in line

navigation service oversight.

According to Rob Erskine, CAAi's head of international operations, the Saudi regulator is already impressive.

"Saudi Arabia is performing very strongly," he said. "Its last ICAO assessment was 89.6% effective implementation. So it is, in its own right, a high-performing regulator.

"But this is all around raising standards, updating the standards to increase that performance to even higher levels."

The UK regulator's technical assistance arm has its own proven track record, having supported some 140 countries around the world.

"We have access to about 1,500 staff within the UK CAA and CAAi who have demonstrable regulatory experience," Erskine said. "Their core role is overseeing the UK aviation industry, but we are able to use that competence and

capability to support international

assignments."

In recent years, CAAi has led capacity-building projects in Kuwait,
Brunei, Thailand, and most recently in
Kazakhstan. "And it's with great pleasure, we've been asked to support
Saudi Arabia," Erskine

The regulatory capacitybuilding projects see CAAi looking at everything from primary legislation, operating regulations in airworthiness, flight operations, personnel licensing, air navigation systems (ANS) and aerodromes right through to organisational design, roles/responsibilities, training needs analysis and the practical implementation of that, in oversight of industry.

REGULATORY A

Erskine said: "Vision 2030 is obviously the motivation behind a lot of the change. Already there has been real visibility of that change.

"GACA has recently established an HQ and offices at Riyadh airport. It has held the first National Aviation Safety Committee (NASC) meeting and is establishing the role of hosting the Regional Safety Oversight Organisation (RSOO) for the Middle East and North Africa. So there's massive momentum, and all of the team involved in international assignments can see that momentum," he said

"We couldn't have been made more welcome on all our visits," Erskine said. "The model that both ourselves and GACA are committed to, is around knowledge transfer, and sustainability. So, this is around sharing best practice, and creating and enhancing the legacy in Saudi Arabia for the longer term."

Erskine said: "We're in a very interesting period for the aviation industry with innovation coming through, right from electric and hydrogen propulsion to drones, which is bringing challenges alongside the growth as well.

"Stakeholder commitment is essential, and it was great to see that during the first NASC meeting as these are the individuals who will drive that change."

With Neom and its well-publicised urban air mobility commitments, new airlines – including the proposed world-class Riyadh Air – cargo and last-mile delivery drones being prepared for air space integration, plus new airport projects across the country, it is impressive that GACA is being proactive in ensuring the regulatory and oversight for the aviation strategy is firmly ahead of the curve.

"In terms of state level targets, you'll have heard the 330 million passengers by 2030. But to ensure it is sustainable, it needs to be done in staggered growth phases to enshrine all of this change," Erskine said. "Our insight so far, is that there is commitment to not only achieve that, but also to build on an already very high-performing regulator in its own right."



Delegations from the UK and Saudi Arabia signing the agreement in Riyadh. IMAGE: CAAI

42





Your MRO Partner of Choice Saudia Technic







Saudia Technic

Partnered with the national airline of Saudi Arabia, Saudia Technic serves regional and global clients from a network of more than 50 locations around the globe. For more than 60 years, Saudia Technic has been a regional leader in the provision of aviation services, leveraging technical expertise, logistic capabilities, and supply chain to deliver end-to-end aircraft maintenance, repair, and overhaul solutions.











EXPANSION

Saudi Arabia's premier MRO organisation is embarking on a transformative journey with a fresh identity and a groundbreaking facility. Welcome to Saudia Technic's MRO Village at King Abdulaziz International Airport in Jeddah.

Chuck Grieve investigates.

VILLAGE OVERHAUL

audia Technic, formerly known as SAEI, is on the cusp of unveiling a colossal new maintenance, repair and overhaul (MRO) village, set to become one of the world's largest such facilities, spanning nearly 1 million sqm, designed to cater to Saudi Arabia's burgeoning demand for aviation MRO.

Scheduled to commence operations by the end of 2024 with the completion of Phase 1, this development signifies a critical milestone in one of the kingdom's major infrastructure projects. It is a key enabling factor in achieving the targets of Saudi Arabia's national aviation strategy, and a pivotal component of the broader Vision 2030 initiative.

The subsequent phases, Phase 2 and 3, are anticipated to conclude by 2025, finalizing this monumental project.

Saudia Technic's rebranding aligns with its parent and primary client, Saudia, which the airline says, "is in line with a wider strategic digital transformation plan aimed at strengthening the airline's support for the kingdom's Vision 2030 to bring the world to Saudi Arabia."

Capt Fahd Cynndy, chief executive of Saudia Technic, said this rebranding is a significant moment in the MRO's 64-year history. "The Saudia Technic identity pays homage to the legacy of SAEI and encapsulates our ambitious vision for a future dedicated to excellence and commitment to meticulous execution."

To catch a glimpse of this vision, one need look no further than the expansive construction works, rapidly taking shape on large swaths of Jeddah's King Abdulaziz International Airport (KAIA).

The Saudi MRO market is projected to grow by nearly 5% by 2028, to a value exceeding \$550 million. The sheer size and scope of this project, revealed during the Dubai airshow in 2015, underline the kingdom's aspirations to diversify



We've been averaging 30 to 35 new mechanics that we train a year through the Prince Sultan Aviation Academy training centre. Now we're looking at 220 mechanics a year. A CAPTAIN FAHD CYNNDY

its economy beyond petrochemicals. It has gained even greater significance as the Saudi aviation sector expands with new airlines and substantial aircraft orders.

While its primary focus will be servicing engines and components of the 200+ Saudia fleet, the village has been designed with space to allow Saudia Technic to provide MRO services to other aviation companies.

Capt Cynndy said aviation experts worldwide view this village as an "enclosed end-to-end solution that has not been seen before in the world".

"Saudia Technic hopes to capture a sizeable share of the aviation market in the Middle East and North Africa with its new facility, earning \$2.66bn in topline revenue within the next decade."

Ramy Nasralla, head of sales, marketing and business development for Saudia Technic, told *Arabian Aerospace* the construction part of Phase 1 "should be completed in late 2024, followed by a brief relocation period from the old site that could run into early 2025."

When the village is ready to welcome its first aircraft, slated for the end of 2024 or early 2025, it will boast an array of operational facilities, including a line maintenance centre, three widebody hangars, a maintenance shop, a paint shop, a washpad, elevated parking and offices.

The new MRO village and jet propulsion centre (JPC), when fully operational in 2025, promises to "revolutionise efficiency and profitability... setting a new standard for operational excellence." It will feature 26 specialised components shops and 11 cutting-edge hangars large enough to hold four wide-bodied aircraft simultaneously for base maintenance. Additionally, the village will have apron space for more than 30 aircraft at any given time.

At the heart of the plans, the JPC will house the biggest engine test cell in the Middle East and Africa region, capable of handling 150,000 lbs of thrust, a remarkable 20% above any existing engine today. Current plans are focused on GEnx, CFM56 and LEAP engines, but the facility is built to handle other engine models as well among its throughput of 250-300 engines a year.

Nasralla said that based on projections, the village would have the capacity to handle the vast majority of all the kingdom's aviation needs and is expected to welcome third-party customers from the outset.

The development has spurred demand for



qualified personnel, especially maintenance engineers, in the kingdom. Capt Cynndy said: "Commissioning the first phase will open more than 7,000 job opportunities. We've been averaging 30 to 35 new mechanics yearly through the Prince Sultan Aviation Academy training centre. That number is now more than eightfold; we're looking at 220 mechanics a year, and we still need to do more."

Diversity is another focus, with Saudia Technic striving to encourage more women to pursue engineering careers.

Increased collaboration with industry leaders such as Lufthansa Technik, Liebherr Aerospace, Thales, GE and Ubisense is expected to drive technological skills, allowing support for newgeneration aircraft acquired by airlines.

Furthermore, they aspire to make significant strides in research and development (R&D) through a new innovation centre, fostering collaborations with universities and SMEs to explore innovative aviation solutions.

Capt Majed Sabbagh, vice-president of Transformation and Shared Services, was keen to stress that the innovation centre would not focus solely on maintenance. "We're looking at it from the ecosystem of aviation locally and in the region. We're looking to become a catalyst. We're defining a space where we could have different aviation people come and look for new ways of doing things.

"The expansion couldn't have come at a more opportune time," said Capt Sabbagh. "Saudia Technic's current site was built to cater for a fleet of 45-50 aircraft. Currently, the Saudia fleet surpasses 150 aircraft and is projected to exceed 200 in the next few years with Flyadeal. The three-phase site development's configuration, with technical workshops positioned behind the hangars and aprons upfront, is expected to boost productivity and efficiency by 30-40%.

"Furthermore," Capt Sabbagh added, "we are building 11 hangars on a space marked for 16, we will have 30% available room for future expansion."

Belgian-headquartered John Cockerill Group is currently installing a complete surface treatment and testing facility in the new shops. This substantial project, undertaken by its Finnish entity Galvatek in partnership with DAES Group, represents a significant development in the MRO market. The new workshop will be among the biggest in the world, the group said, and comprises a chemical cleaning line and four separate surface treatment lines for anodizing, passivating, phosphating and silverplating jet engine components.

Additionally, Galvatek will supply nondestructive testing (NDT) equipment, including fluorescent penetrant inspection (FPI) and magnetic particle testing (MPI), along with facilities for automated mechanical cleaning, wastewater treatment, and painting.

Galvatek was selected over competing American

and European suppliers. With a total value of more than \$21 million, this project represents biggest single contract and delivery to date for the group's surface treatment business line.

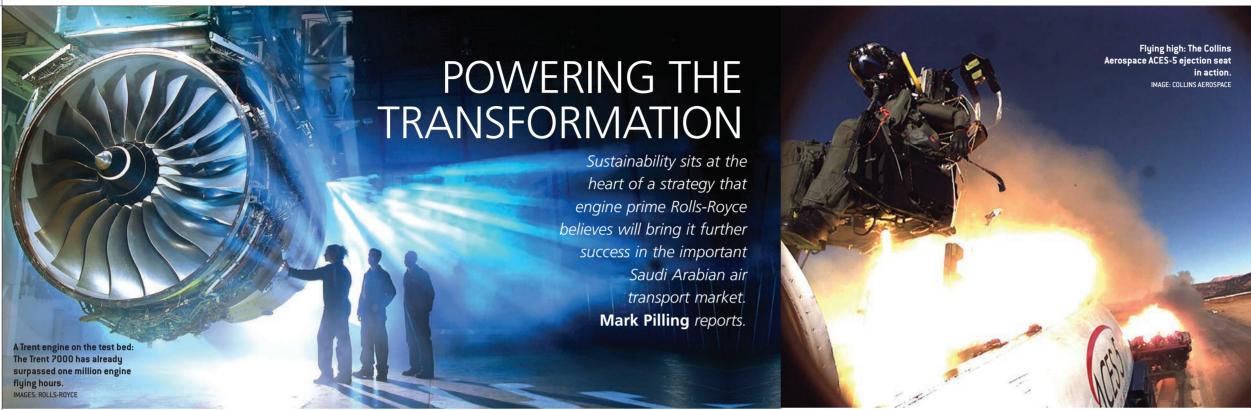
Jarno Virtanen, managing director of Galvatek, said in a statement: "Our expertise convinced our Saudi Arabian client, Saudia Technic. As a global leader in the supply of surface treatment lines and equipment for the MRO market segment, we have successfully delivered similar facilities to the international aviation industry for decades."

Samuel Crets, head of John Cockerill Industry's surface treatment business line, said: "We are proud to assist Saudia Technic in its meticulous mission of achieving the highest levels of excellence, safety and quality across the spectrum of aviation maintenance, repair and overhaul."

In conclusion, Saudia Technic's MRO Village represents a monumental leap forward for Saudi Arabia's aviation industry. With its state-of-the-art facilities and ambitious vision, it is set to revolutionise the region's MRO landscape and contribute significantly to the kingdom's Vision 2030.

As it prepares to welcome aircraft for the first time in 2025, the aviation world watches with anticipation as this world-class facility takes flight

ROLLS-ROYCE COLLINS



olls-Royce engines have been at the core of powering Saudi Arabia's air transport market for decades, and with the kingdom's high travel and tourism aspirations, this record looks set to continue.

"From the RB211s on Saudia's Lockheed Tristars of the 1980s, to the classic Trent 700 engines currently powering its fleet of Airbus A330s, Rolls-Royce power offers a reliable and fuel-efficient combination for both domestic and international routes including the growing Umra and Hajj traffic," said Omar Ali Adib, senior vice-president, Rolls-Royce Civil Aerospace MENA Region.

"We see aviation as an enabling force to drive the Kingdom's transformation plans contributing towards a thriving economy, one of the key pillars of its Vision 2030."

As Saudi Arabia positions itself as a hub for international trade, the kingdom's aviation industry "will develop at pace to meet the demands of tourism, business travel, pilgrimage and logistics." he added.

To meet the travel and tourism goals set by the government, current and future players must all play their part. "We are optimistic with the opportunity in the kingdom for both the existing airlines such as Saudia, Flyadeal and Flynas but also for the new airlines like Neom along with the greatly anticipated launch of the new national carrier Riyadh Air," said Ali Adib.

"In all circumstances, Rolls-Royce's proven family of Trent engines is well-placed to help serve the ambitions of the kingdom.

"The combination of our hugely reliable Trent 7000 with the Airbus A330neo is a great example. After entering service in early 2019, the Trent 7000 has already surpassed one million engine flying hours – the equivalent to flying 10,000 times around the Earth."



Omar Ali Adib: "In all circumstances, Rolls-Royce's proven family of Trent engines is well-placed to help serve the ambitions of the kingdom."

The A330neo is described by Airbus as a versatile widebody, enabling cost-efficient operations across a wide range of missions. Saudia operates a fleet of 30+ A330neos.

"For the A330neo, Airbus has brought the latest generation technology to the hugely successful A330, the best-selling widebody aircraft ever, to deliver latest generation aircraft economics for its operators around the world and in Saudi Arabia," said Ali Adib.

"The Trent 7000 brings the latest gas turbine technology, delivering exceptional reliability, sustainable performance, and proven versatility," he added. "The Trent 7000 also enables the aircraft to achieve 14% better fuel burn per seat."

This efficiency equates to a reduction in CO2 emissions of more than 100,000 tonnes over the lifetime of an aircraft, said Ali Adib. "Therefore, the quickest way airlines can achieve their own emissions goals is to invest in new generation aircraft like the Trent 7000-powered A330neo."

Sustainability driven by net zero goal

Sustainability is at the core of all Rolls-Royce's relationships, and to emphasise this, all its engines will be proven compatible with sustainable aviation fuel (SAF) this year.

"We are driven by net zero goals and our commitments to decarbonise the industries in which we operate," said Ali Adib. "Aviation is central to this, but so too are the technologies that drive these ambitions."

Rolls-Royce is investing in a variety of sustainability projects and initiatives as it seeks to bring products to market that can help operators meet net zero carbon goals.

"Innovations in our Rolls-Royce Electrical business are being adopted to power the fastemerging eVTOL and UAM markets, with our electric motors chosen to fly the first commuter aircraft," said Ali Adib.

"Energy transition will drive the achievement of reducing CO2 emissions. Producing green hydrogen and SAF through nuclear energy requires an integrated approach, an area where Rolls-Royce is leading with our small modular reactors (SMRs)," said Ali Adib.

In addition to its strong work in the air transport arena, Rolls-Royce is active in a range of energy-related initiatives in Saudi Arabia. "Multiple applications for our powerpacks, microgrids and storage systems exist, one of the key priorities for the new network of vertiports anticipated across the major urban centres of the region."

WORKING SIDE BY SIDE WITH THE KINGDOM

Collins Aerospace, now part of RTX, has a long history of partnerships in Saudi Arabia, and sees vast opportunities in the current environment, **Steve Nichols** reports.

with the Saudi Arabian Ministry of Defence, integrators, aircraft manufacturers, airlines and others, and now has a presence in Riyadh and Jeddah to support its commercial and defence customers. "Building sovereign capabilities is a critical part of Vision 2030," says Amal Osman, managing director of Collins Aerospace's Middle East and Africa division.

Vision 2030," says Amal Osman, managing director of Collins Aerospace's Middle East and Africa division.

"Across our business units in the region, which represent a rich and diverse product portfolio, we are committed to working with local partners to support the transformation of KSA and its economy."

ollins Aerospace has been working for decades

Among its partners is Saudi Arabian Military Industries (SAMI). Says Osman: "We have worked extensively with SAMI Advanced Electronic Company (AEC) for the production and assembly of avionics displays and communication systems for several platforms used in the country."

Collins' partnership with SAMI AEC has helped establish capabilities in production, and assembly, plus MRO services, to support several platforms including the Boeing F-15 jet fighter.

It has also established a joint venture with BAE Systems to provide communication systems and Link 16 terminals to help the Royal Saudi Air Force (RSAF) achieve interoperability with the US and its allies.

"We have also partnered to establish local MRO capabilities for military and commercial applications but felt that we needed more of a customer support presence, hence the new offices in the country," she said.

"I see vast opportunities in the kingdom, and there are a lot of changes in the aerospace sector as part of Vision 2030 that we can help with.

"As Collins Aerospace is now a business of the RTX Corporation, it brings together Pratt and Whitney and Raytheon which enables us to create innovative solutions for both commercial and defence."

On the commercial side, it works directly with most of the kingdom's airlines. "We provide significant content on both Airbus and Boeing aircraft, from cabin seating to key systems such as the electrical distribution to the air management system, and from galleys to connectivity elements." Osman said.

It also provides FlightSense diagnostics on Saudia's Airbus A320, A330 and Boeing 787 fleets through its fully-integrated Ascentia prognostic health monitoring system (PHM), providing a 24/7 fleet monitoring team to SAEI and its MRO operations.

The system uses advanced analytics and human experience to provide advanced maintenance recommendations and preventative diagnostics to reduce fleet downtime.

Collins says typical results with PHM include around a 30% decrease in potential delays and a 20% decrease in unscheduled maintenance.

"We are also growing our airport solutions side of the business, helping with baggage handling and passenger processing among others, using artificial intelligence (AI) to provide a more seamless experience for passengers," Osman said.

"On the defence side, we work with the RSAF and provide sensors, such as the DB-110 reconnaissance pods for the Boeing F-15s, command, control, communications, computers intelligence, surveillance and reconnaissance (C4ISR), plus communication and navigation solutions."

The company is also introducing the next-generation ACES 5 ejection seats to upgrade legacy ACES II seats on the kingdom's Boeing F-15 fleet. ACES 5 features enhanced head, neck, arm and leg flail prevention and a load-compensating catapult based on the occupant's weight.

Osman said: "We are also helping with diversity in the armed forces as part of Vision 2030 by offering this new ejection seat that is better suited to female pilots who may be lighter and is better adapted to their morphology."

It is also offering unique upgrades to the Lockheed Martin C-130, including avionics, propellers, plus wheels and brakes.

Collins now leads a C4ISR project originally awarded to Raytheon, but subsequently been moved to Collins Aerospace as part of RTX's business "realignment".

In February, Collins signed a memorandum of understanding with SRB Aerial Systems to support research, development and execution of unmanned aerial systems and robotics for use by the kingdom.





الشركة السعودية لتهيئة وصيانة الطائرات **LUFTHANSA CONSULTING BOEING**

Lufthansa Consulting takes pride in supporting its Saudi Arabian clients as they contribute to transforming the kingdom's aviation sector and building a big new tourism industry. **Steve Nichols** reports.

THE CHALLENGE – TO MAKE A WORLD OF DIFFERENCE

ufthansa Consulting has been working successfully with aviation clients in Saudi Arabia for more than a decade on management consulting projects including airlines and their

Alexander Manakos, Lufthansa Consulting's partner responsible for business in the Middle East, said the focus of the company's consulting projects has changed in recent years from operational efficiency and performance improvement to growth strategies in the passenger and logistics sector.

"The country is in an economic transformation process, and aviation significantly contributes to the increase of travel and especially tourism-related income," Manakos said.

He noted that the introduction of e-visa 2019 has made the kingdom much more accessible. Its 2030 target is 330 million people annually – triple the current number of

"We see a variety of promotional activities encouraging tourism. While it hardly existed in the past, we expect a tremendous increase in the number of tourists in the coming years, which will create jobs and drive local economic growth.

"This is why we see significant developments in the airline landscape within the country."

Riyadh Air is a new national airline with impressive growth plans, underlined by the recently announced Boeing 787 order for both it and Saudia. New airports, including King Salman International and Red Sea International airports, have been announced or will open soon.

Manakos said: "We believe that the impact on the competing hubs, such as Dubai and Doha, will be rather low as the new capacity is needed to serve the growing demand within and to/from Saudi Arabia.

"Therefore transit traffic, for example from Asia to Europe, will initially not be the core target market of Saudi airlines." But such a big transformation process brings challenges.

"The biggest challenge at a macro level is probably to orchestrate all the stakeholders in order to maximise their contribution in making the aviation sector more competitive and offering passengers a world-class travel experience along all the passenger touchpoints," he said.

"Major investments have already been made into airport infrastructure at the hubs of Saudia and Rivadh Air, and will continue.

"When it comes to the airlines, it is probably all about alignment of those entities that are bundled under the umbrella of the Public Investment Fund (PIF) and to make sure that their strategies complement rather than compete

Other factors to consider are competition from

neighbouring countries, and overcoming the global shortages of trained crew.

"The availability of aircraft is also a hurdle." Manakos said, "Manufacturers like Airbus and Boeing, but also seat manufacturers and other suppliers, face supply chain challenges, which makes it much harder to deliver the aircraft and equipment that are required for the growth."

Manakos sees the kingdom's potential to become an aviation superpower, adding that political and economic ambition is visible and the financial resources are available.

But what changes need to take place to make Saudi Arabia a tourist destination?

"Saudi Arabia is being put on the map of potential tourism destinations, where it was practically non-existent in the past. We are not talking about religious travel, but about classical tourism," he said.

"When it comes to perception as a potential travel

destination, Saudi Arabia is being promoted by

many initiatives addressing the interests of different segments, be it archaeology, culture, education, or arts. "Also, sporting events like the Saudi Arabian Grand Prix are contributing to the attractiveness of the destination." Regular visitors such as Manakos,

Arabia for more than a decade, find it "amazing to see how rapidly the country is changing". "Lufthansa Consulting is proud of

being a dependable partner for the stakeholders in Saudi aviation for such a long period. We will be happy to continue and to grow our management consulting activities in the kingdom."







LONG PARTNERSHIP WILL HELP DELIVER THE KINGDOM'S VISION

US civil and military OEM Boeing has a longstanding presence in Saudi Arabia, with recent purchases likely to extend that into the foreseeable future as

Alan Dron reports.

's an indicator of the strength of Boeing's links with Saudi Arabia that an order earlier this year by new Saudi flag-carrier Riyadh Air was the fifth-largest commercial aircraft order the US manufacturer has received in its 107-year history.

The new airline bought no fewer than 72 Boeing 787-9s – 39 firm orders plus 33 options – as it prepares to take off in early 2025. Meanwhile, existing national carrier Saudia announced an order for a further 39 787-9 and -10s, as well as 10 options.

"It was an amazing deal for us," said Ahmed Jazzar, president of Boeing Saudi Arabia. However, it was perhaps not surprising, given the length of time that the US planemaker has had a presence in the kingdom.

"Saudi Arabian Airlines was one of the first, and probably the first in the Middle East, to fly a jet," he said. "It took the 707 and I don't think there was a single model we built that wasn't operated by Saudia, so the connection is very strong. This [787] deal is just a continuation of this long partnership."

The Rivadh Air order came with a cautionary note from the airline's chief executive, Tony Douglas. Bearing in mind the recent delivery delays by the world's airliner manufacturers because of supply chain bottlenecks, Douglas warned Boeing at the Paris airshow in June that it could not be late in handing over Riyadh Air's aircraft.

As a new carrier, Riyadh Air will have no existing fleet on which to rely if there are delays in delivering the 787s, he said: "We've got no fallback. These machines need to be delivered in early 2025."

Boeing understands that situation, Douglas said, and Jazzar concurs. "Delivery to customers is extremely important," he said, "That's job No 1 for everyone in Boeing from the CEO down. We do have a lot of customers that we have to satisfy and customers compete for delivery dates. I

understand that for a new airline like Riyadh Air, they want to start strong."

Jazzar is confident of continued expansion of the aviation sector in Saudi Arabia. It is well-known that the growth of aviation is a direct corollary of growth in the wider economy "and what's happening in the kingdom is phenomenal".

"For example, by 2030 they would like to have more than 300 million travellers in the kingdom." That triples the number of passengers arriving and departing Saudi Arabia today. "So, you're going to need the hardware to do that.

"A lot of people don't realise how large this country is, so what you have is a built-in domestic market that doesn't exist in a lot of other countries." To fly from south to north takes 2.5 hours, perhaps more, he noted.

With all those factors in place, it was interesting to see recent reports that clearly indicated the country believed there is space for more players, in the form of the new NEOM Airline and the planned low-cost carrier in

Boeing is also very active in the military field in Saudi Arabia. F-15 Eagles form the backbone of the Royal Saudi Air Force (RSAF).

At 2022's World Defence Show in Riyadh, Boeing signed a joint venture with Saudi Arabian Military Industries (SAMI) to create a joint venture supporting helicopter maintenance work in the country. The RSAF's inventory includes Boeing CH-47F Chinook heavy lift helicopters, AH-64 Apache anti-tank helicopters and AH-6i light attack

The enterprise is now up and running and handles both routine and depot maintenance for helicopters, as well as repairing components. The plan is for the company to play a part in the country's Vision 2030 economic diversification project by localising maintenance and repair work that has previously had to be undertaken in other countries.

53

Alexander Manakos

ENGINEERING

EXPANSION GDC MIDDLE EAST

Catrion is the new branding of Saudi Airlines Catering, and heralds a move to diversify in line with the goals of Vision 2030. Marcelle Nethersole reports.

Catering dishes up a new brand

ince its establishment in 1981, Saudi Airlines Catering has witnessed a rapid expansion in local and international markets.

On 4 October, the company became part of that expansion with its rebranding as Catrion, with a goal of embracing new opportunities in retail, healthcare, railways

of its revenues. The company serves 72 million in-flight meals across Saudi Arabia in 2022, as well as providing catering for

Mohammed Abdulaziz Al Sarhan, chairman of Catrion. "Our menus are designed to offer intriguing culinary experiences, served with efficiency, adaptability and an emphasis on quality and safety."

Commenting on the new branding, he said: "Our unwavering commitment to innovation has been the hallmark of the continued growth and success of Catrion. The new brand positioning signifies the bold direction we at this exciting point in our evolution.

into new sectors to fulfil the mandate of Vision 2030 and contribute to the diversification of the kingdom's economy.

"We will continue to expand our core in-flight catering services and airport lounge network while forging new



Success on a plate: The company serves 72 million in-flight meals annually. PICTURE: SAUDI AIRLINES

sustainability and innovation, and its commitment to people and all stakeholders across the value chain, will continue to power its growth as the company continuously innovates to meet evolving customer needs."

Bakhsh, CEO of fast-growing aerospace engineering company GDC

Middle Fast.

Chuck Grieve

talks to Muneer

passion for the aerospace and defence industry has taken Muneer Bakhsh to where he is today at the head of GDC Middle East.

Bakhsh teching the

Vision to a new level

Bakhsh is chief executive of one of Saudi Arabia's leading engineering enterprises, focusing on the aerospace and defence sectors with specialisation in MRO, systems integration, and delivering unmanned aerospace systems (UAS) capabilities – a 100% Saudi company owned by the Public Investment Fund (PIF).

Since its launch in 2015, GDC has seen "tremendous growth", jumping from 250 employees then to more than 800 in 2021, with an anticipated headcount of 2,000 by the end of 2024. This, says Bakhsh, is a reflection of the Vision 2030 mandate under which all companies in the kingdom

"Our strategy is being specialised in MRO and upgrades for fixed and rotary wing aircraft. We have transformed the company from providing a range of basic services to defence aviation."

targeting three vital business areas in the aerospace and defence industry within Saudi Arabia – aerospace engineering, systems integration and MRO – in line with the market and the needs of key customers. repair capability in 2024 along with a battery shop; these are capabilities

> Vision 2030, he said, gave strong impetus to GDC and other defence companies going forward to invest in technology, training and

support functions in the defence sector.

technical training as we grow. GDC is well behind all three pillars of Vision 2030 which are important for the kingdom: technology transfer, know-how and

Close to 70% of GDC's current workforce are Saudi nationals. "We see a lot of good people graduating from Saudi technical institutes in mechanical and structural engineering, avionics and so on," he said. "We are hiring these young talented graduates, and we also provide on-theiob training."

The technical knowledge of GDC's employees is one of its biggest strengths, and the company is constantly updating and adding expertise with further ratings in fixed and rotary wing aircraft and systems. This in turn feeds into the company's growth with more contract wins from multiple

Bakhsh brings to his senior leadership role the experience of working for some of the leading OEMs in civil and business aviation.

A specialist in composite structural design and manufacturing, he was a member of the design teams for the Boeing 787 Dreamliner, Gulfstream G650, G500 and G600, and Hondajet.

He also has experience with Goodrich and Composite Design Solutions which specialised in design, analysis and manufacturing support for composite components for

In 2016, he established and led "one of the most advanced aerospace composite facilities in the world" at Saudi Technology Development and Investment Company (TAQNIA). Subsequent appointments include senior roles at Saudi Arabian Military Industries (SAMI), Middle East Propulsion Company (MEPC) and GDC.

Joining GDC, he said, was "like my ejection into aerospace management. Coming from a technical background helped a

Bakhsh is excited about the potential he sees in the kingdom. "We plan to take advantage of every opportunity by providing quality services to our customers," he said "We're one of the top companies in the kingdom, providing

The company operates out of its base in Riyadh

GDC plans to establish a blade centre needed for the support and growth of the Saudi military fleet including MoD, national guard, navy and land forces. operations as well as other

> "We are supporting Vision 2030 more than ever before by increasing our Saudi workforce and providing them with

superior maintenance on time and on budget. "We are close to our customers and understand their needs. We go above and beyond to support them. "Quality and customer satisfaction take you a long way." We are supporting Vision 2030 more than every before by increasing our Saudi workforce and providing them with technical training as we grow. **MUNEER BAKHSH**



INVESTING FROM THE GROUND UP

Saudi Arabia's ground handling sector presents a compelling opportunity for both domestic and international investors. Chloe Greenbank reports.

Demand is growing for ground handling services as Saudi Arabia's airport infrastructure develops, new and existing carriers expand their networks and e-commerce opportunities boom.

Earlier this year, Menzies Aviation signed a Memorandum of Understanding (MoU) with Saudi Logistics Services (SAL) to set up passenger handling services for low-cost carriers at the kingdom's

The MoU aims to increase capacity and enhance the customer experience in line with the kingdom's Vision 2030 targets.

Faisal AlBedah, managing director and chief executive of SAL, said the agreement will help ensure the "ongoing development of this vital sector and increase its contribution to the Saudi

GDP, as well as driving the national economy in light of the kingdom's ambitious vision."

The biggest cargo handling firm in Saudi Arabia, SAL also announced at the end of September that it is aiming to raise up to SAR2.5bn (\$678 million) from its imminent initial public offering (IPO).

Menzies is not alone in targeting growth in the country. In August, Swissport Saudi Arabia was selected by Royal Jordanian Airlines to provide ground handling services at four airports: King Abdulaziz International in Jeddah, King Fahd International in Dammam, Prince Mohammad Bin Abdulaziz in Medina, and King Khalid International

While the agreement marks the beginning of Swissport's collaboration with Royal Jordanian in Saudi Arabia, the ground services company has its sights set on expanding its operations there.

Domestic ground handler Saudi Ground Services (SGS), which currently operates at 28 airports in the country, is also seeking to leverage growth in the sector. In 2022, it handled more than 100 airlines, 600,000 movements and nearly 70 million

In addition, it is catering for the burgeoning needs of the sector through its training and development academy, which is accredited by the International Air Transport Association (IATA) and approved by the General Authority of Civil Aviation (GACA). It offers a range of e-learning and classroom courses to help prepare Saudi Arabia's workforce for tackling the sector's anticipated growth.

IMAGE: GDC 54





MISSION POSSIBLE: The crew aboard the International Space Station, including Saudi Arabia's Rayyanah Barnawi (front right) and Ali Algarni (second left). MAGE: NASA

WATCH THIS SPACE

Saudi Arabia has put space firmly on its developmental map since setting up its Space Commission in 2018. Now renamed the Saudi Space Agency, it has ambitious plans, as Steve Nichols reports.

ne Saudi Space Agency (SSA) has four main priorities: encouraging economic development and innovation, human capital development, enhancing national security, and enhancing international cooperation.

But Saudi Arabia's ambitions for space actually started 38 years ago when Prince Sultan bin Salman Al Saud took part in space shuttle mission STS-51G. That was 1985, and this year, two astronauts from the kingdom travelled to the International Space Station (ISS) on a private mission, operated by Axiom Space.

Ali Algarni and Rayvanah Barnawi, from the SSA. accompanied Peggy Whitson and John Shoffner on the Ax-2 mission, aboard a SpaceX Dragon flight. Back-up Saudi mission specialists were Ali AlGhamdi and Mariam Fardous.

Algarni, an experienced fighter pilot, brought more than 12 years of flying experience with 2,387 flight hours on multiple aircraft, including the Cessna 172, Beechcraft T-6, Northrop T-38, and Boeing F-15S. He also piloted a Boeing F-15SA for the Royal Saudi Air Force.

Barnawi is a biomedical researcher with almost a decade of experience in cancer stem cell research. She made history as the first Saudi female astronaut to go to space and one of the first Saudi astronauts to visit the ISS.

The four-person Axiom Space crew flew to space on 21 May in SpaceX's Dragon spacecraft atop a Falcon 9 rocket to participate in the mission.

The Ax-2 crew spent eight days aboard the ISS, orbited the Earth 126 times, and travelled 3.3 million miles (5.3 million km). The crew conducted more than 20 research experiments and served as research subjects to understand better the impacts of microgravity on the human body.

Speaking from the ISS during a video call to Earth, Algarni said: "This moment is historic, not just for me but for every Saudi. As I look outside into space, I can't help but think that this is just the beginning of a great journey for all of us."

Barnawi added: "The future is very bright. I want you to dream big, believe in yourselves and believe in humanity."

The crew also carried out more than 20 engagements in STEAM disciplines (science, technology, engineering, the arts, and maths).

The mission was part of the kingdom's programme for astronauts, which was launched on 22 September last year. The mission represents Saudi Arabia's ambitions in space research and is among the goals of its Vision 2030 initiative.

Organised by Houston-based space company Axiom Space, the organisation collaborated with SSA to train the Saudi astronauts for human spaceflight and prepare them to conduct scientific research in space.

The AX-2 crew safely splashed down off the coast of Florida at 11:04 pm EDT on 30 May.

SSA has plans for future missions. These include short-term trips (up to 30 days) during which scientific missions are carried out, and long-term missions (up to 180 days), which will include detailed scientific research and require long-term follow-up and analysis. No dates are currently set for the

In terms of unmanned missions, Saudi Arabia recently launched the Badr 8 satellite, which will offer TV, broadcast and communications capabilities to Europe, Africa, the Middle East and Central Asia. Badr 8 (ArabSat 7B) is the latest in ArabSat's line of telecommunications satellites.

King Abdulaziz City for Science and Technology (KACST) also has a fleet of seven SaudiComsat satellites. These are the first generation of Saudi Arabian low-orbit microcommunications satellites, weighing 12kg each, for commercial use, for the purpose of store and forward communications. Reportedly they are part of a 24-satellite constellation to be launched in the future with different orbits to cover large parts of the world.

SaudiComsat 7, launched in 2007, also carries an automatic identification system (AIS) receiver to gather position data from ships.



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