

SHOW BUSINESS



ROYAL BAHRAIN AIR FORCE WARNS OF THE NEED TO ADAPT TO A NEW AIRBORNE MENACE

KAMIKAZE UAVS A REAL THREAT TO BAHRAIN



Counter-unmanned aerial systems were very much the key subject for most of the speakers at the Manama Air Power Symposium, held on the sidelines of the Bahrian International Airshow yesterday. The Royal Bahrain Air Force (RBAF) chief, Major General Sheikh Hamad bin Abdullah Al Khalifa, spoke of the shift in the style of conflict that is affecting plans to defend the country's population.

"We are confronted with kamikaze drones and cyber warfare, which could affect the likes of our health care and government management," he said. "These changes in threat mean that we have to alter our defence styles. We have to ensure more integration with our allies and look more to advanced technologies to assist us."

Not too surprisingly, the Iranian Shahid 136 drone, believed to be widely used by the Russian

military in Ukraine, was viewed by Brigadier General Abdulla Alnoaimi, the RBAF's Air Police commander, as a main protagonist. "A low-budget drone, costing between \$10,000-20,000, should be stopped by an air defence system of an equal cost," he said.

"The threat, of course, comes from Iran, although thankfully so far nothing has come our way. Saudi Arabia has suffered most from these uncrewed air vehicle (UAV) attacks.

"We have a robust air defence system covering all altitudes, not just against the low-level UAV threat, and we will soon be receiving the Patriot system to combat the likes of cruise missiles and other strategic weapons."

The RBAF operates a diverse air defence system, not just through its F-16s, but through the likes of the Oerlikon Skyguard, Bofor Rbs70, Crotale, Super 35mm Fliedermouse system and MiM-23 Hawk.

At the conference, Brigadier General Abdulla, who served eight years in the air defence role before becoming the air policing commander, said: "We have to face the strategic challenges caused by a conflict of interest by a country at the international level. This serves the interests of terrorist groups, and we have to be prepared for countries supporting terrorism, either directly or indirectly."

Countering the combat UAV is an issue that has confronted several Middle East countries for a decade now, and is a top requirement for the Ukraine Air Force as war rages in Europe. It is undoubtedly causing many air forces to alter their military doctrine and find ways of stopping such a dangerous threat.

Altering defence styles—Brigadier General Abdulla Alnoaimi, the RBAF's Air Policing Commander

Alan Warnes

▲ MORE FROM MAPS, P3

Stronger Together



Secure a Brighter Future, Today

As a trailblazer of Israeli innovation, IAI is a leading global provider of state-of-the-art technologies, with a long tradition of excellence in high-end solutions for the defense and commercial markets worldwide. Whether on air, land, naval, space or cyber – together we can rise above and beyond the challenges of today and tomorrow and ensure a brighter and more secure future for our region and our countries.

www.iai.co.il • corpmkg@iai.co.il

Meet us at
**Bahrain International
Airshow - Booth H70**



Discover More



Daily news updates on timesaerospace.aero

Why we must throw a shield over the peninsular



The Royal Bahraini Air Force commander, Major General Sheikh Hamad bin Abdullah Al Khalifah, is grateful to the RSAF for its air defence support

Kamikaze drones with their high explosives are a real threat to Bahrain and the wider GCC countries, according to the Royal Bahraini Air Force commander.

“All countries have to be prepared for any attack by these ‘knock-off’ uncrewed air vehicles (UAVs),” said Major General Sheikh Hamad bin Abdullah Al Khalifah on the side-lines at the MAPS 2022 conference.

“All the Gulf states have modernised their air defence systems to cope with these threats and, while we are all currently working

separately, the goal is that they will eventually be integrated into one big shield for the whole peninsula.”

On the subject of integration with other GCC air forces, in the way that NATO does, the RBAF commander seemed disappointed. “It is very slow. I wish it would go faster. Our relationship with the Royal Saudi Air Force is excellent. We are particularly close in the air defence sector that overlaps Isa Airbase, and we regularly reciprocate. I can’t thank them enough.”

When it comes to fighter integration with other GCC air forces, the

commander was unequivocal in his response. “Undoubtedly, the best is with the F-15s of the Royal Saudi Air Force, as well as with the United Arab Emirates Air Force and Air Defence F-16 Block 60s working with our F-16As [Block 40s].

“We are looking forward to our F-16C/D Block 70s arriving in 2024 so that they can work with them.” While Lockheed Martin is still hopeful that the RBAF will eventually upgrade the older F-16A/Bs, the RBAF commander said: “We have other priorities right now.”

The first of 12 Bell AH-1Z Vipers that the RBAF ordered at the 2018 BIAS are now in country but, the US attack helicopter won’t be attending this year’s show.

“We need them flying, not sitting in the open in the static display,” explained the commander. “But they will be displayed for His Majesty the King, Sheikh Hamad bin Isa, in a couple of days’ time, when we have a small exercise.”

NEWS IN BRIEF

Glasgow connection

The Textron AT-6C Wolverine demonstrator N610AT in the static display transited Glasgow Airport, Scotland on November 4 en-route to Bahrain. The following day, two T-6Cs for the Royal Thai Air Force night stopped in Glasgow before heading east on delivery. There is some speculation that AT-6C demonstrator will follow them to Thailand after the show ends, on loan for three years.

Space for more cooperation

On the eve of the Bahrain International Airshow, the venue hosted the eighth meeting of the Arab Space Cooperation Group, and the first to be held outside of the United Arab Emirates.

Following a welcome speech by HE Mohamed bin Thamer Alkaabi, Minister of Transportation and Telecommunications, delegates witnessed the signing of an MoU creating a basis of collaboration between the national space agencies of Bahrain and Egypt.

The agreement aims to create opportunities for expertise and data exchange, as well as enhancing cooperation on space projects in the two countries.

The show will also host the first specialised space forum to be held in the Kingdom of Bahrain, in which representatives of Arab and foreign space agencies will discuss topics related to the development of the space sector at the public and private levels.



HE Dr Sherif Sedky, Egyptian Space Agency (left), and HE Mohamed bin Thamer Alkaabi, Minister of Transportation and Telecommunications, at the MoU signing



Visit our editorial office at in the Show Operations Centre next to entrance or email us at news@arabianaerospace.aero

Arabian Aerospace Show Business is published by Times Aerospace Publishing Ltd

Director of content Alan Peaford
Editor Steve Knight
Editorial Alan Dron, Marcelle Nethersole, Jill Stockbridge, Alan Warnes
Imagery Jim Robbins
Design & production Amelia Clark
Distribution Ethan Cobbing

Publisher Mark Brown
mark.brown@arabianaerospace.aero
Marketing & circulation Clare Brown
clare.brown@arabianaerospace.aero
Display advertising Grant Lee
grant.lee@arabianaerospace.aero
Printed by Al Hilal Group

Advertising TIMES Aerospace Publishing Ltd
3-4 Rumsey House, Locks Hill, Rochford, Essex SS4 1BB, UK
+44(0)1702 53 0000
Content Aerocomm Limited, Norths, Rectory Road, Orsett, Essex RM16 3JU, UK
+44 (0) 208 133 3420

KEEP IN TOUCH

Twitter @TimesAerospace
YouTube Times Aerospace TV

At the Forefront of Defense

Tailor-Made Air Defense Solutions Connecting Legacy & Modern Systems



See us at
BAHRAIN AIRSHOW 2022
Booth No. C54



RAFAEL 
ADVANCED DEFENSE SYSTEMS LTD.
www.rafael.co.il

Upgraded Cobras bare their teeth

Two upgraded Royal Bahraini Air Force AH-1FBs in the static display are making their public debut.

They are part of a multi-million-dollar contract that saw 17 of the Vietnam-era Cobras modernised by Turkish Aerospace. "We have turned an old helicopter into a new one," said one RBAF officer.

Originally signed in 2015, nothing

more was heard of the deal after relations between the Turkish and Saudi governments soured because of the different militias the two sides were supporting in the Libya War.

At BIAS 2018, personnel from Turkish Aerospace would not comment on the work, although there was Cobra upgrade literature at its stand. The usually open

RBAF commander would only say: "They should all be delivered by the end of 2020," adding that it covered a "good number of helicopters".

Yesterday, a source close to the programme said: "After the first aircraft was delivered here, the RBAF worked alongside Turkish engineers to integrate the upgrades at Riffa Airbase." Riffa is

where all the Cobras operated by 8 and 9 Squadron are based.

The work draws on the avionics systems already operational on Turkey's T129 advanced attack and reconnaissance (ATAK) helicopter.

An Aselsan ASELFLIR 300T electro optical/infra-red turret, positioned on top of the Cobra's nose, replaces the laser range finder previously housed there.

The ASELFLIR 300T system houses a high-resolution infra-red camera, laser range finder/designator (LRF/D), laser spot tracker, colour day TV camera and a spotter TV camera.

In the front cockpit two multi-function displays replace the old analogue gauges.

Mounted on both sides of the two Cobras on the outer pylons are a pair of quadtrack launchers for Roketsan Cirit 2.75 inch laser-guided missiles to complete a wholly Turkish upgrade.



Alon Wornes

▼
One of the two upgraded AH-1FB Cobras

'Space' race: see the industry's only ultragalley on the Gulfstream

Visitors to the show will have a chance to explore the luxurious interior of Gulfstream's new G700 jet on the static display during the event.

The fully outfitted production test aircraft is making a stop in Bahrain as part of an extensive world tour showcasing the most spacious cabin in the industry to potential customers.

The test aircraft has been showing off its performance capabilities in testing and already has eight international city-pair speed records under its belt.

"Two outfitted G700 aircraft currently flying feature the most stunning interiors in business aviation," said Mark Burns, president, Gulfstream.

"After being on display for

the industry at NBAA-BACE in Orlando, Florida, the G700s are flying to major events and private showings across 20 cities and six continents as part of our efforts to give customers direct access to the aircraft.

"The strategic route of the G700 world tour reflects the strong demand we are seeing in established markets, such as Europe and the Middle East, and in growing markets for us, including south-east Asia, India and Africa."

The production test aircraft showcase the industry's only ultragalley, with more than three metres of counter space; a grand suite with fixed bed and lavatory with full vanity and shower; the dynamic circadian lighting system; an award-winning seat



design; and the lowest cabin altitude in the industry at 889 metres when flying at 12,497 metres.

▲ Visitors to the show can experience the luxury of Gulfstream's new G700 jet



Thunder rolls in to show

The Pakistan Air Force is making a welcome return to the BIAS after an absence of eight years, with three of its Pak-Sino JF-17 Thunder Block 2 variants. Pakistan Aeronautical Complex, which builds the aircraft, is keen to sell the jet to Bahrain, possibly as an F-5E/F replacement.

There are two examples available for the flying display that are regularly being swapped (one pictured above). These are flown by Squadron Leader Sibtain and Wing Commander Muddasir.

The latter is commanding officer of 2 Squadron 'Minhasians', which has brought the aircraft to Bahrain.

The third JF-17, parked in the static display outside the PAC Kamra chalet, is also a Block 2 version but, unlike the other two, is fitted with an air-to-air refuelling probe. Surrounding it are several weapons that are available as options for the PAF JF-17s.

More than 150 Chengdu JF-17s have been delivered to the PAF's six operational squadrons, including around 20 dual-seaters, as recently as 2019/20.

The more capable Block 3 JF-17s, fitted with a new KLJ-7A AESA radar, are now coming off the PAC Kamra production line.

Cargo boost with Mena in alliance deal with Asia

Bahrain's ambitions to develop activities in the air cargo arena will take a solid step forward at the Bahrain Airshow today.

Manama-based Mena Aerospace will be signing a significant strategic alliance agreement through its aircraft management business (MEA) with Singapore's Asia Cargo Network (ACN), this afternoon.

The two companies have already approved an outline agreement and will put pen to paper at the show. ACN is believed to be taking a 49% stake.

The cargo partnership agreement will be signed by Dr Mohammed Juman, founder and managing director of Mena Aerospace, and Marco Isaak, the CEO of ACN group. The move will position the new alliance among the key freight players of Middle East, South Asia and Africa.

Under the agreement, ACN will base six of its cargo aircraft in Bahrain and the GCC, where it plans to service the internal MENA region as well as cargo routes into and from the region.

The first of its six aircraft, to include a B737-800F and B767-300F, are due to arrive within the next two months, and will be deployed in an 18 month timeframe.

ACN's aircraft and MEA's existing Boeing 737-300 converted freighter will expand the operational fleet within the region.

Speaking ahead of the show, Dr Juman said: "As part of our growth plan, over the past couple of years we looked at and analysed the regional markets to see where the growth is and where the gates are to the global markets."

"The growth and potential we saw is mainly in the GCC area, Africa and south-east Asia. Our thought process was to try to link and serve these markets."

"CAN, as the leading freight cargo operator in south-east Asia, was identified as the perfect partner to expand our services in these markets. We are certain that this partnership will prove fruitful to both companies and the markets that we serve."

The partnership operations will be under the 'Mena Cargo' brand – the freight subsidiary of MAE – and operations will be fully managed by ACN. Both partners hold Bahrain to allow for the expansion of routes across the MENA region.

Dr Mohammed Juman, founder and managing director of Mena Aerospace



Freight expectations: new Gulf order for Boeing in excess of \$1.7bn



Big deal: Emirates has expanded its freighter fleet with five Boeing 777s for SkyCargo

Boeing was celebrating another Gulf order on the eve of the show. Dubai-based Emirates is expanding its freighter fleet with an order for five 777 freighters, valued at more than \$1.7 billion at list prices.

Emirates was a launch customer for the 777 Freighter and is currently the world's largest operator of the 777 family, with nearly 150 of the aircraft type in its fleet.

"We value the trust that Emirates has repeatedly placed in its all-Boeing

freighter fleet," said Stan Deal, president and chief executive officer Boeing Commercial Airplanes.

"The expansion of Emirates' fleet with these additional fuel-efficient 777 Freighters will enable the airline to support its growing cargo market demand, transporting goods rapidly and efficiently from origin to destination in the Middle East and around the world."

The aircraft will be operated by Emirates SkyCargo.



THE CENTRE OF AEROSPACE, STRATEGY AND INSPIRATION

12 - 16 NOVEMBER 2023 | WWW.DUBAIAIRSHOW.AERO
DWC, DUBAI AIRSHOW SITE

BOOK YOUR SPACE TODAY



FOLLOW US ON: [f](#) | [in](#) | [@](#) | [t](#) | #DUBAIAIRSHOW

KEY SECTORS:

COMMERCIAL AVIATION | AIRCRAFT INTERIORS | MRO | BUSINESS AVIATION | AIR TRAFFIC MANAGEMENT | SPACE | DEFENCE & MILITARY | AIR CARGO | EMERGING TECHNOLOGIES

SUPPORTED BY:



Enhance your flying experience.



BOSE A20 AVIATION HEADSET

The A20 Aviation Headset features acclaimed noise reduction, comfort, clear audio and intuitive operation in a familiar around-ear design.

Ideal noise environment	High Noise levels typical of piston engine aircraft
Noise reduction level	Highest
On-head weight	340 grams (12 ounces)
Configuration	Around-ear
Certification	FAA TSO and E/TSO-C139
Military-grade durability	✓
Bluetooth® audio streaming	✓
Five-year warranty	✓

Get yours at Boseaviation-EMEA.aero/shops



Flying is your passion.
Active noise cancellation
is ours.

BOSE A20 AVIATION HEADSET

The Bose A20 Aviation Headset features 30% greater noise reduction than conventional aviation headsets, with technology developed through decades of research and development to help pilots focus on flying the aircraft. The A20's noise cancelling microphone provides clear outgoing communication, and a comfortable fit improves your flying experience, no matter how many hours you fly.

Get yours at Boseaviation-EMEA.aero/shops



E-COMMERCE. IT'S BE FAST OR BE LAST. AND WE DON'T DO LAST.

Half of all shoppers will pay for express delivery. In fact a third will actively choose a merchant who offers a premium service, keeping sales growing 24/7, 365. We offer flexible delivery options so shoppers can choose where, when and how fast they receive their package. We'll help your business **keep up with the clicks**.

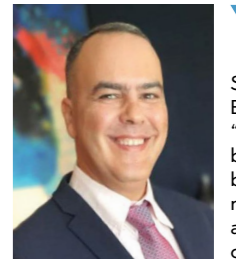
Learn how -> [dhl.com/ecommerce](https://www.dhl.com/ecommerce)



KEEP UP WITH THE CLICKS

Daily news updates on timesaerospace.aero

Why bridge-building IAI feels 'at home' in Bahrain



Sharon Biton—“creating bridges between nations and people comes first”

For a commercial organisation, hearing one of its senior executives saying that making money is not the most important factor comes as something of a surprise.

But, according to Sharon Biton, Israel Aerospace Industry's (IAI) VP for the MENA region, “creating bridges between nations and people comes first”.

IAI is exhibiting at the show in what the company describes as “an historic first”. IAI's presence is a result of the Abraham Accords, signed between Israel, Bahrain, and the UAE in September 2020.

Biton is full of praise for the welcome Bahrain has accorded both IAI and him personally: “The warmth of welcome you get from everyone – from taxi drivers to the leadership – is amazing. It always feels like coming back home.”

The drive to normalise relations between the countries has seen Israeli companies, such as IAI, strike up agreements with many Gulf organisations.

Many of the projects in which IAI is involved in the region are understandably sensitive and Biton is unable to go into details about them. But Israel and the Gulf states have an obvious common adversary. “You don't need me to assess the threat here. You know what the threats are,” said Biton.

No deals will be signed at the show, but many are being prepared or are already under way. And it is not a case of Israel supplying technological expertise and the Gulf states supplying the necessary funding: “There are wonderful, smart people here in the Gulf,” said Biton. “In many cases [projects

are] pure joint ventures.”

One area Biton can talk about in general terms is counter-UAV warfare – a subject that has come sharply into focus in recent weeks with Russia's use of Iranian Shahid 'kamikaze drones' to attack Ukraine's electricity and water infrastructure.

A joint venture to counter drones is under way with the UAE's Edge

defence conglomerate, while another is related to electro-optical equipment with Earth, part of the Edge group.

“Unfortunately, the enemy is getting smarter and smarter,” said Biton. “For hostile UAVs using GPS, it is fairly simple to spoof, hack or jam them. But, if you're handling 50 drones at once, that's a challenge.” In many defence deals,

the recipient country wants to assemble the hardware itself; in the Gulf, said Biton, the emphasis is on technology transfer.

The Abraham Accords are as strong under the Biden Administration as under its Trump predecessor, said Biton.



TYPHOON GOES FOR A BAHRAIN DOUBLE

One of Saudi's Typhoons has an in an edgy digital colour scheme

Two Royal Saudi Air Force BAE Systems Typhoons are doubling up at the show. One will make a daily appearance in the flying display, in an edgy digital colour scheme, while the second is

parked in the static display. The latter appears in an overall black colour scheme to celebrate Saudi's 91st National Day in September 2021. It was first seen at the World Defense

Show in March in Riyadh. The Typhoons are here as part of a marketing drive by BAE Systems, which is still keen to sell the fourth-generation fighter to Bahrain and Saudi Arabia.



WORLD DEFENSE SHOW
SAUDI ARABIA
4-8 FEB 2024



Download Our Sales Brochure

Experience the Future of Defense
See you in February 2024

FOUNDED BY
الهيئة العامة
للمتاعن العسكرية
General Authority
for Military Industries



@WDS_KSA

www.worlddefenseshow.com

Premium equestrian transportation with Texel Air.



A bespoke service made for you – your schedule, your location, our premium service. It's equestrian logistics simplified.

Please join us at stand E60 to learn more about Texel Air's top-of-the-line aircraft equestrian transportation service.



info@texelair.com | www.texelair.com

Daily news updates on timesaerospace.aero



Airman 1st Class Deanna Muir

▲ Going first: A Tunisian Air Force pilot and his instructor approach the newly delivered T-6C Texan II

Tunisia steps up with Textron Texan II delivery

Textron Aviation Defense has delivered the first of eight Beechcraft T-6C Texan II Integrated Training Systems to the Tunisian Air Force. The aircraft will operate in support of No 13 Squadron at Sfax Airbase in Tunisia. In addition to the aircraft, the US foreign military sales (FMS) contract encompasses in-country field service and logistics support representatives, programme management support, interim contractor support for the first year, training for pilots and maintenance professionals, spare engines, spare parts and aircraft support equipment. Fouad Kasri, director of sales and strategy for Africa and the Middle East, Textron Aviation

Defense, said: "We are honoured the Tunisian Air Force has chosen the world's best and most affordable military trainer – the legendary Beechcraft T-6C Texan II – as its next primary trainer. Tunisia is the 13th nation to acquire the T-6 and has now taken delivery of the 1,001st T-6 manufactured by our team in Wichita. "We are delighted to welcome yet another north African and Mediterranean allied nation to the distinguished group of global air forces who rely on the next-generation T-6 Integrated Training System to achieve their pilot training objectives." Textron expects to deliver the second Tunisian Air Force T-6C in late 2022, with the remaining six aircraft slated for delivery in

2023. Training of the first cadre of pilots began at the end of October at the Textron facilities in Wichita, Kansas. Additionally, the Tunisian Air Force will rely upon TRU Simulation + Training Inc, an affiliate of Textron Aviation Inc, for a suite of training devices and related support. The devices, which will be installed at Sfax, include a ground-based training system, an operational flight trainer and a computer-based training lab. Textron is displaying the Beechcraft AT-6E Wolverine light attack aircraft at the BIAS. The multi-mission aircraft system, which can be seen on the static park, has yet to find a buyer in the region, but last year the Royal Thai Air Force awarded Textron a \$143 million contract or eight Beechcraft AT-6E Wolverine aircraft, ground support equipment, spare parts, training and other equipment, with delivery scheduled for 2024. The company has reported global interest in both the Beechcraft T-6C Texan II and Beechcraft AT-6E Wolverine, with prospective customers across nearly every continent. The increased interest in the Wolverine comes in the wake of multiple nations having recently conducted some successful AT-6 operations with the US Air Force at Moody AFB, during which they matured and co-developed tactics, techniques and procedures.



Looking for a local buyer? The AT-6E Wolverine at the BIAS

▲ NEWS IN BRIEF

GE celebrates engine milestone

GE is celebrating a milestone with its CT7-2E1 helicopter engine achieving its 250th engine delivery. It was shipped to Leonardo in late September in support of the AW149 and AW189 helicopter programmes respectively. According to Elissa Lee, director of GE Aerospace's commercial turboshaft engines: "The production rate for the CT7-2E1 has been steadily increasing and we anticipate the production line will continue for many more decades to support the AW149 and AW189 programmes due to its outstanding reliability and performance."

The CT7-2E1 has proven itself with reliable operations in harsh and maritime environments, while offering lower engine weight, lower fuel consumption, and maintenance cost advantages compared to other engines in this power class. As with all of GE's engines, the CT7-2E1 can operate with approved sustainable aviation fuel (SAF) blends to reduce lifecycle CO2 emissions. As an example, the AW149 helicopter flew with SAF fuel at the Royal International Air Tattoo (RIAT) in the UK earlier this year. GE is heavily involved in the qualification and testing of approved SAF blends.

A study in endeavour

The 2023 Endeavour Scholarship Awards will take place tomorrow at 13.50pm. Founded by The Endeavour Scholarship Foundation, Kallman Worldwide, and in association with the Bahrain National Space Science Agency, Ministry of Transportation and Telecommunications, and BIAS, students were selected by demonstrating drive, determination, and a desire to further their studies in STEM subject fields. The scholarship was named for Apollo 15 pilot, Colonel Al Worden, and the Endeavour spacecraft.



أكاديمية الخليج للطيران
Gulf Aviation Academy

Aviation Training Excellence

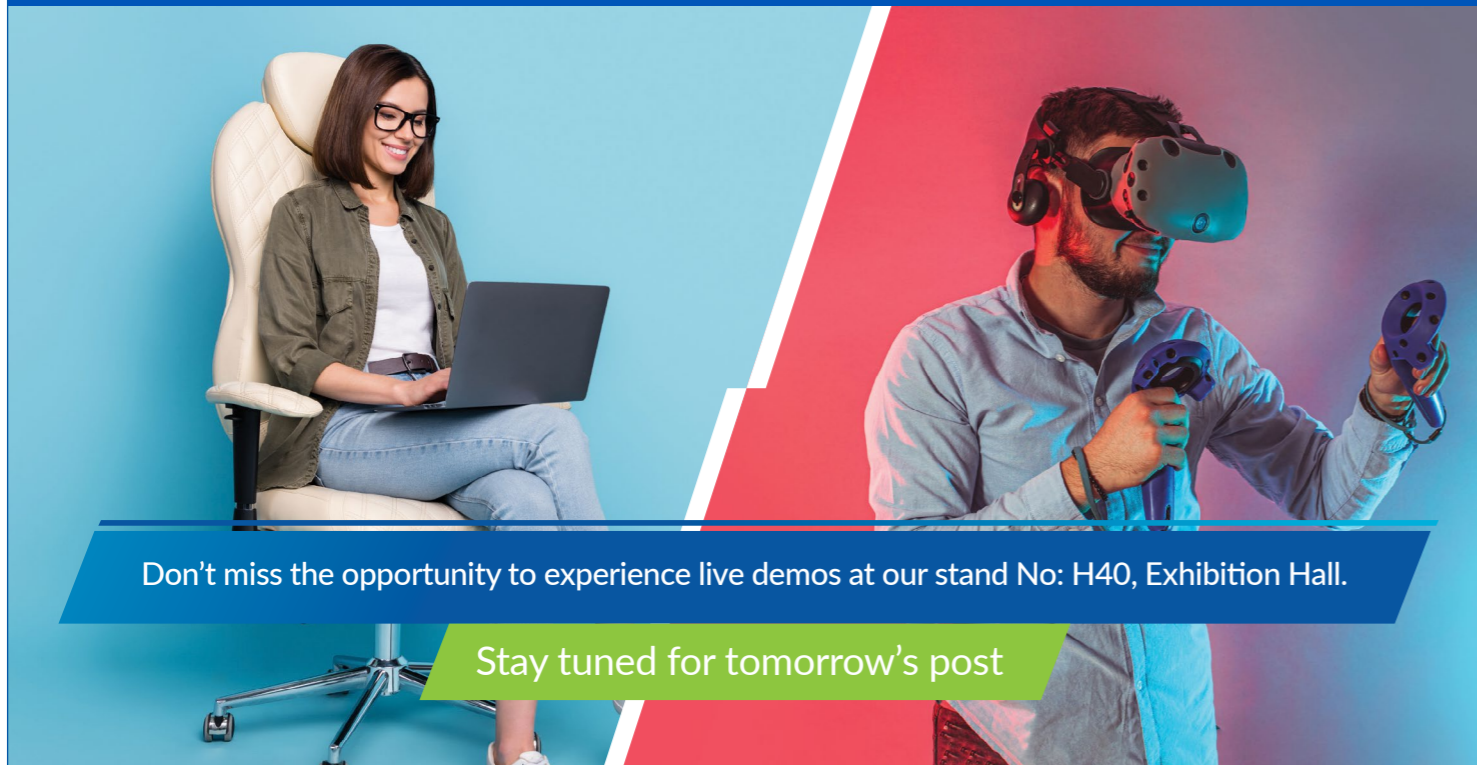


Gulf Aviation Academy (GAA) offers an extensive range of structured training programs, particularly for the aviation and maritime industry.

We aim to provide top-tier training by working closely with our customers to understand the key requirements and identify areas of development to bridge the gap of providing students with invaluable knowledge, skills, and hands-on experience. Our training can be delivered both locally as well as internationally.

Our training facility is fully operational around the clock, 24 hours a day and 7 days a week that is backed by a qualified, knowledgeable, experienced, and passionate training team who is ready to offer full flexibility for your training needs.

The Bahrain International Airshow 2022 will mark the debut of our unique AR/VR technology and E-learning offerings along with a variety of other programs



Don't miss the opportunity to experience live demos at our stand No: H40, Exhibition Hall.

Stay tuned for tomorrow's post

Now. Ear. This. BYO Bose headset hygiene

Light fantastic!
Patrick Schutterop
demonstrating the
personal headset

Before the global pandemic, it was normal for pilots to share headsets, and for operators to use the aircraft installed headsets. But with a much greater focus on hygiene and the threat of a virus that could put you out of action for a week, attitudes have changed.

Patrick Schutterop, business manager – Aviation EMEA & APAC, Bose Aviation, said: “We have noticed more and more professional pilots want to take their privately owned and personally used headset on to each flight, rather than sharing an aircraft equipped headset.

“With our range of Bose aviation headsets, these hygiene issues are no longer a concern. And with all the advantages that the ProFlight Series 2, or the A20 aviation headset offer, you can have a whole new cockpit experience.”

The Bose ProFlight headset is the smallest and lightest available, with an on-head weight of just 128 grammes. Specifically engineered

for airline flight decks and pilots operating moderately noisy pressurised turbine powered aircraft, it is designed for comfort and performance and will fit into any carry-on flight bag, taking up very little space or weight.

Schutterop added: “On long, hot days in the cockpit you will barely notice any pressure wearing this active noise cancelling communication headset, designed for long-term comfort.

“ProFlight offers three levels of user selectable active noise cancellation, active equalisation to improve intelligibility of incoming transmissions, a noise cancelling microphone for clearer outgoing transmissions, talk-through tap control for communication with those outside the intercom, and full function Bluetooth connectivity with smartphones, tablets or EFBs.”

In addition to the ProFlight Series 2, Bose Aviation is demonstrating the award-winning A20



on its stand at the show.

The A20 is an around-ear aviation headset configuration offering 30% greater noise reduction than conventional headsets, clear audio and a very comfortable fit. Both headset models are FAA TSO and EASA ETSO certified, meeting all applicable ARINC standards.

Schutterop also noted that the headsets’ TSO certification is an important assurance for pilots, confirming that they are compatible with other avionics equipment on board the aircraft, and have been rigorously tested to meet or exceed the demands of the flight deck environment.

Edge brings the Thunder when it comes to innovation

The UAE’s defence conglomerate, Edge, is at the Bahrain show to demonstrate its extensive range of autonomous solutions and

precision-guided systems. The group, which brought together a number of defence manufacturers in the emirates

under a single umbrella, has been strengthening its partnerships within regional defence ecosystems, and will be showcasing its products and solutions to the GCC region at the show.

Speaking ahead of the show, Mansour AlMulla, the Edge CEO, said: “As our advancements in autonomy come to fruition, the Bahrain International Airshow presents a great opportunity to meet with our customers and industry colleagues from around the world.

“We are ready to showcase some of our most innovative UAE-made solutions with our partners in the broader Gulf region and look forward to discussing their priorities, and how we can further accelerate the building of sovereign capabilities in this

critical domain.”

Three of Edge’s entities will display advanced solutions and products covering autonomous systems and precision-guided munitions.

Halcon will showcase a range of precision-guided systems and loitering munitions, including the Thunder series, Desert Sting family, Nasef, and Skynex systems; while Al Tariq will be displaying its line of highly modular long-range precision-guided munitions.

Edge’s autonomous capabilities will be represented by ADASI’s QX-1, QX-2, QX-3, QX-4 loitering munitions, and Garmoosha UAV, as well as its Rash 1H, Rash 2H, and Rash 2M precision-guided munition systems.



Life on the Edge – the group is ready to showcase some of its most innovative UAE-made solutions

Daily news updates on timesaerospace.aero

DHL and Eviation Aircraft: Together in electric dreams

Alice unchained: Mock-up of the Eviation Aircraft Alice in DHL livery and e-Cargo configuration

DHL is celebrating the successful maiden flight of Alice from Eviation Aircraft.

Alice is the first fully electric commuter aircraft and DHL will be the launch customer for the e-cargo configuration, having ordered 12 as part of the company's push to achieve net-zero emissions by 2050.

Geoff Kehr, SVP global air fleet management at DHL in Bahrain, was ecstatic at the news. He said: "This was history in the making, witnessing an all-electric twin-engined fixed-wing aircraft capable of flying hundreds of miles take to the sky for the first time."

"The technologies to achieve this historic milestone are complex, so making this happen was a momentous occasion. DHL is proud to partner with the first twin-engined electric flight."

The aircraft was originally mooted as expecting deliveries from 2024. However, as it has only just begun its certification process, it seems unlikely to be delivered

before 2027. Kehr acknowledged the delay and anticipates MENA certification and approval only by 2029.

He said: "The leading-edge technology has proven challenging to perfect and meet the exacting standards for commercial air transport certification, so the earlier certification timelines have been extended to meet this reality. Alice will be certified initially in the US at the beginning of 2027, so first deployments will, therefore, occur there."

European EASA certification will follow soon after enabling Alice to operate across all of Europe. Once the two major certifying agencies have approved Alice, I would expect the type certification being granted by the MENA regulators soon after."

Although the company initially plans to deploy the aircraft in central America and Africa, the Middle East is part of the long-term plan.



Kehr said: "The current range of 250 nautical miles facilitates the point-to-point air connectivity of most city pairs in the region, so Alice most definitely has a role to play in the region, whether in cargo or passenger configuration. The imperative to seek and promote zero emission air transport solutions is as strong here as in other regions."

In the meantime, DHL is

implementing measures locally to improve sustainability and reduce environmental impact.

Bachi Spiga, head of operations MENA, said: "This fits with our current initiatives to improve and optimise flying, including sustainable aviation fuel, purchase of newer more efficient aircraft, and harnessing of new technologies in flying that support sustainability."

After an exceptional year, FAI builds on 20 years in the Middle East

FAI Aviation Group, a provider of mission-critical aviation services, is participating at this week's show – some 20 years after it first set up operations in the region.

With 20 aircraft in its predominantly Bombardier fleet, the group anticipates record sales across the business for 2022, with consolidated group revenues of more than \$120 million.

Revenues for charter and MRO have each increased by more than 30% compared with the same time last year. During the pandemic, the decrease in charter business was offset by an equivalent increase in its air ambulance operations.

Since the end of the pandemic, the group has experienced a steady increase in air ambulance work, while charter outperformed, result-

ing in hitherto unexpected expansion in the sector.

The group expects to see a more moderate growth forecast at 8-10% per annum over the next five years, including in the Middle East region, which currently accounts for 20% of FAI's flying activity.

Siegfried Axtmann, founder and chairman, said: "We are delighted to return to the Bahrain Interna-

tional Airshow this week, following what has been an exceptional year for the group. The Middle East is an important region for FAI and, along with our excellent collaboration with Mumtalakat, the sovereign wealth fund of the Government of the Kingdom of Bahrain, the show offers great opportunities for us to meet with new and existing customers."



menacargo.aero



asiacargonetgroup.com




timesaerospace.aero



A speciality in Le Sauvage, the dry ageing of the meat allows it to develop a greater concentration of flavour to heighten the tenderness and texture of the beef, resulting in the perfect steak, cooked to your exact requirements. To complement the plentiful menu, we carefully composed a fully stocked wine list that boasts nearly 200 labels prominently displayed in the restaurant's wine cellar. Excellently paired with friendly and attentive service, no detail is spared in setting the tone for the perfect dining experience.

@ Level 34 - Opens daily from 6:30 AM until 12:00 AM





Our unrelenting
passion fuels
change.

Because we believe
the world works
better when it flies.

Having researched and tested Sustainable Aviation Fuel (SAF) for over a decade, GE's cutting-edge technology research and development has already enabled the first passenger, freighter, and military demonstration flights using 100% SAF in at least one engine.

With the commitment, determination, and scale to play our part in the industry's goal to achieve net-zero, we're not stopping there. As well as ensuring that all GE and GE partnership engines can operate with approved SAF today, we continue to innovate and bring to market changes in propulsion on our journey to net-zero carbon emissions.

See what we're doing today for the benefit of us all tomorrow.

[GEtoNetZero.com](https://www.ge.com/eto-net-zero)



Building a world that works

Daily news updates on timesaerospace.aero



AL FURSAN IS A SLIMLINE TONIC

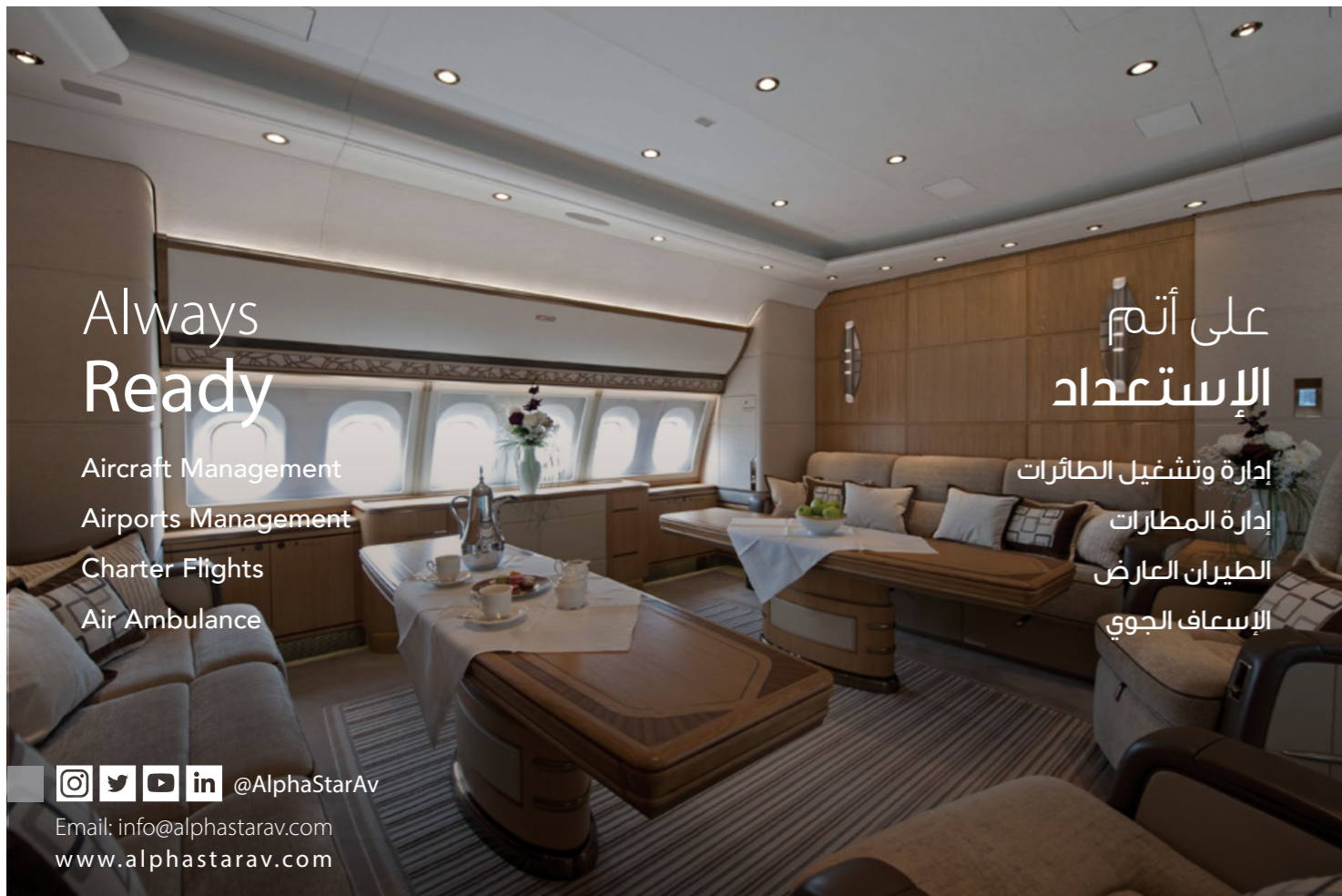
UAE's Al Fursan aerobatic display team are at the show but in a slimmed down format with only five aircraft instead of the normal nine. This is believed to be the first display with the reduced number, which has likely come about

because of the reduced availability of the Italian MB 339PANS. In February, the UAE MoD agreed to buy 12 Hongdu L-15A to replace the MB 339s, which are expected to be retired next year.

▲ UAE's Al Fursan is only flying five MB339s as the type gets set to be withdrawn from use next year

Flexibility is the key as Texel expands freight fleet again

▲ "A model of efficiency and flexibility": one of Texel's two Boeing 737-700FlexCombi is here on the static line



The booming air cargo market is providing the backdrop for Bahrain-based Texel Air to significantly increase its fleet of Boeing 737 freighters.

On the static line here is one of the company's two Boeing 737-700FlexCombi, which George Chisholm, CEO of Chisholm Enterprises, Texel Air's parent company, describes as a model of efficiency and flexibility.

Texel Air is the world's only commercial operator of the model, which can be configured to carry both cargo and passengers simultaneously.

"Years of research, discussions with partners, and consideration internally have come to fruition with our two Boeing 737-700FlexCombi," Chisholm said.

"Now we are seeing first-hand the reality of this aircraft's capabilities, being able to meet and deliver our customers' various needs, providing them possibilities they have never seen before."

The company began life with a single 737-300F.

"It has been especially crucial for our business to have such flexibility during the

pandemic. We have been able to switch our configurations of the 737-700FlexCombi to the changing needs of the global environment," said Chisholm.

The FlexCombi, produced by US conversion specialist Pemco, can be switched between seven layouts and Texel's machines have been modified to allow the company to support military, government and utility markets.

The configurations include one that offers seven pallets with 12 seats, six pallets with up to 24 seats, and two additional medevac layouts.

The aircraft are equipped with a lavatory, galley, airstairs and mood lighting, plus an in-flight entertainment system from GoGo Aviation.

The 737-700FlexCombi can carry a payload of up to 18.1 tonnes and has a maximum range of 4,770km.

It is a measure of the strength of the cargo market in the Gulf that Texel Air has already decided to increase its fleet further, by ordering four of the even more capable 737-800BCFs (Boeing Converted Freighters).

The Bahraini company opted



for the -800BCF rather than more -700FlexCombi because the Boeing conversion serves a different market.

Texel uses the -800BCFs to provide capacity for the express package and e-commerce sectors, where existing customers have been demanding a larger-volume aircraft with longer range.

The longer-fuselage -800BCF model means that it offers 40% more main-deck volume than the company's -300/-700 fleet, plus 60% more in the belly hold.

It can carry 22.7 tonnes over

3,750km, for example, and will open up new destinations for Texel in regions such as India, east and north Africa and the Levant.

▲ As well as showing off the FlexCombi, Texel is announcing that it has partnered with Collins Aerospace to install the company's head-up guidance system and enhanced flight vision system on the FlexCombi.

Instagram, Twitter, YouTube, LinkedIn icons @AlphaStarAv

Email: info@alphastarav.com
www.alphastarav.com

Daily news updates on timesaerospace.aero

It's Show-time! Conference programme with something for everyone

This year's Bahrain International Airshow (BIAS) will offer an 'exceptional' new conference programme. The event will feature two completely new conference theatres and houses four forums over Thursday and Friday. The new content and insight programme features key executives from across the world. Forum topics include: airlines and airports, women in aviation, cargo and logistics; and space. The programme kicks off with the airport and airlines panel on Thursday from 10am at theatre one.

The panel will focus on 'charting the path to the next normal – as we strive for a more sustainable and inclusive growth'. Panellists will look at the opportunities for industry as new travellers take to the skies. Key speakers will include: Alex Dichter, managing senior partner, McKinsey Company; and Swati Tandon, associate partner. The panel, which also includes Kamil Alawadhi, regional vice president Africa and Middle East, IATA; and Adel Alali, chief executive officer, Air Arabia, will follow up with: What does it mean to be sustainable in the airline industry? The panellists will also look at how the industry is coping with the shortage of skilled personnel, low budget verses legacy airlines, and how new players potentially becoming game-changers. Also taking place on Thursday



KEY SPEAKERS INCLUDE
 Wolfgang Lehmacher, former head of supply chain and transport industries, World Economic Forum; and Sue Donoghue, Arab Cluster CEO, (Bahrain, Kuwait, Saudi Arabia), DHL Global Forwarding

from 10am, but at theatre two, will be the new space forum.

Sessions will include exploring how new players, technological advancement and human inventiveness are reshaping the space industry, and what needs to be done to secure space sustainability. The session will also talk about how companies can encourage the next generation to enjoy a career in space, and entrepreneurship opportunities, including for women, as the MENA region has the highest percentage of female STEM subject graduates but the

lowest female workforce. Key speakers during the space sessions will include: Dr Mohamed Ebrahim Al Aseeri, chief executive officer, National Space Science Agency; and Salem Butti Salem Al Qubaisi, director general, UAE Space Agency. Women in aviation are now playing much larger roles within the industry. In June next year, IATA will welcome RwandaAir CEO, Yvonne Manzi Makolo, as chair of the association's board of governors – the first female appointed to this position.

On Friday at theatre one from 10am, the women in aviation forum kicks off. Talks will include breaking down barriers for women in aerospace. Speakers include: Yasmeen Fraidon Mohammed, first Bahraini pilot, Gulf Air; and Heidi Grant, president of business development, Boeing. Taking place at theatre 2 from 10am will be the cargo and logistics forum. Discussions will include how rising energy prices have an impact on logistics, and how should logistics companies position themselves? ▲

BAHRAIN DELIGHTED TO BE SEEING RED

The famous Royal Air Force aerobatic team, the Red Arrows, are on a tour of the Gulf region promoting UK interests and are making their Bahrain International Airshow debut in the flying display. Speaking at a press conference ahead of the show, Wing Commander David Montenegro said the team will

perform at all three BIAS days. "Bahrain is a beautiful place to fly," Montenegro said. "It is special to be able to do three full displays for an international audience." Flying displays in the Arrows' home country have been constrained, with the world-class performers often restricted to fly-pasts rather

than the awesome displays that have won plaudits around the world. The displays, and associated ground engagements, are an opportunity to further develop the long-standing diplomatic, military and trade relations between the Kingdom of Bahrain and the United Kingdom.

The Arrows will be meeting the public and show visitors during their visit. "We are doing two science and technology STEM events while here in Bahrain and the squadron will speak to members of the public and trade partners at the show," Montenegro said.

FARNBOROUGH
INTERNATIONAL

AIRSHOW

22-26 JULY 2024

2024

PIONEER THE FUTURE



Providing an unparalleled global platform for businesses from across the world to share their story, exchange knowledge and develop vital commercial relationships.

Get Involved Now

FarnboroughAirshow.com



Space



Defence



Sustainability



Innovation



Future Flight

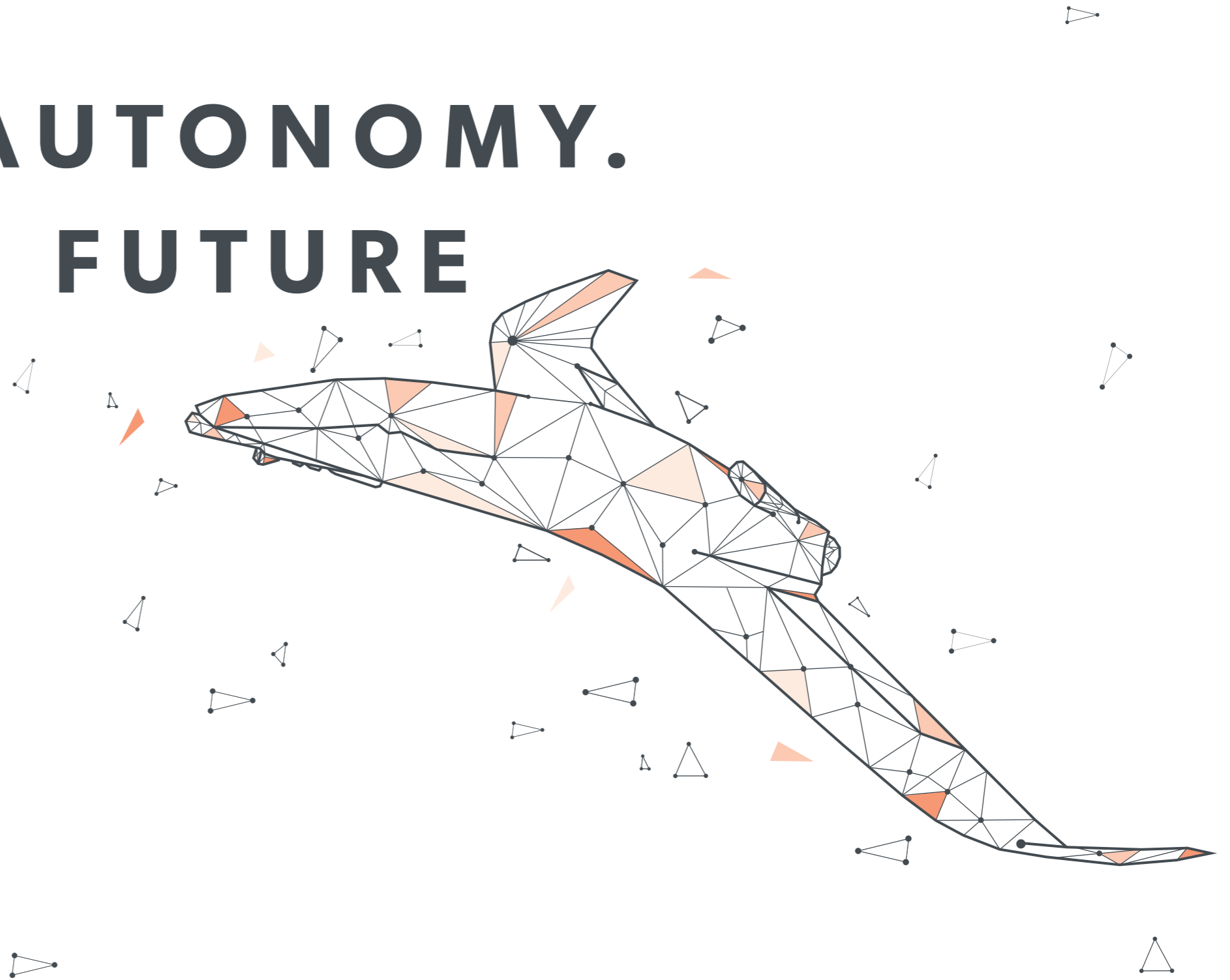


Workforce

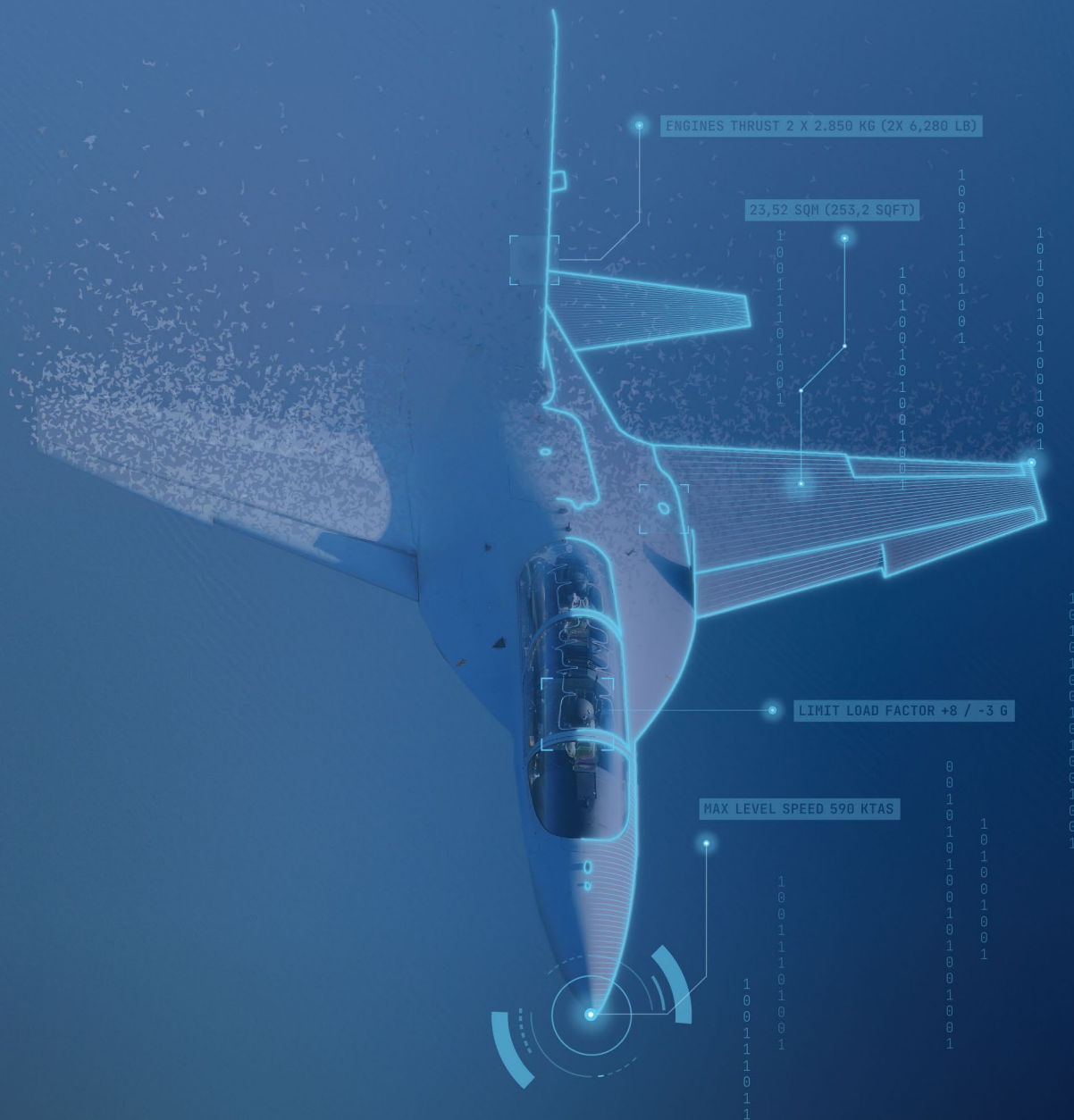


ADVANCED AUTONOMY. MAKING THE FUTURE POSSIBLE.

At EDGE, our families of advanced UAVs don't just make the future possible. They make it happen – here and now. From Garmosha, our lightweight unmanned helicopter, to our QX series of smart loitering munitions, we enable your decisive edge in operations far from home. Delivering autonomous advantage. And keeping your valuable human assets ever safer.



TECHNOLOGY EVOLVES HERE.



Leonardo builds a sustainable future through industrial capability, investing in strategic skills

Leonardo is home to the sustainable future thanks to its long-term vision, consisting of engineering expertise, knowledge and skills. It exploits the digital to enhance its legacy businesses, accelerating technological evolution.

Visit us at BIAS, Chalet A24



leonardo.com

