

The international guide to business airports, FBOs and ground support partners

# Business Airport

I N T E R N A T I O N A L

April 2019

Discover new partners, routes and destinations

## EXCLUSIVE

Interview with  
**Niclas von Planta,**  
the new president  
of the Swiss  
Business Aviation  
Association



# CORSIA

Is carbon offsetting the right solution  
for reducing your jets' emissions?

## In this issue

### Flying to Japan

Work is underway to change the negative perception of business aviation in the country

### Ground handling

A guide to keeping business jets safe on the ground as well as in the air

### Drones

How to reduce the threat that unmanned aerial vehicles pose to your business

Interview: Sino Jet | Case study: Courchevel Altiport  
City guide: London | Event preview: EBACE 2019

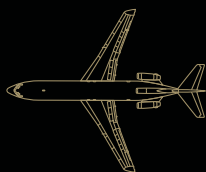
4<sub>x</sub>  
IS-BAH™  
STAGE II  
CERTIFIED



## UNRIVALED PRIVACY & CONVENIENCE

Since 1989, the I.A.M Network has consistently assisted all of the leading flight service companies, as well as scores of individual charter, corporate and diplomatic flight departments from around the world. In addition to our four flagship FBOs in Barbados, Montego Bay – Jamaica, Grenada and Tortola – British Virgin Islands, The Jet Centre maintains a special network of dedicated handling agents and fuel providers that extends to 24 airports throughout the Caribbean region.

Visit – [www.iamjetcentre.com](http://www.iamjetcentre.com) to learn more.



THE JET CENTRE BY I.A.M

BARBADOS | TBPB   MONTEGO BAY | MKJS   GRENADA | TGPY   TORTOLA | TUPJ   ST. LUCIA | TLPL [COMING SOON]

# In this issue...



## Arrivals lounge

### 04 **New in Milan**

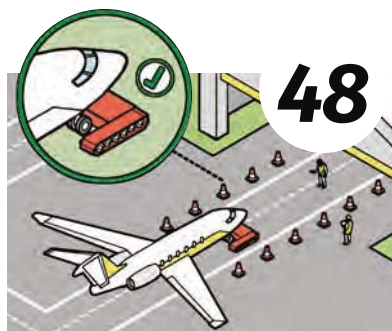
SEA Prime is opening a new business aviation terminal at Milan Malpensa Airport

### 08 **Safety first**

NBAA highlights its safety focuses for 2019

### 10 **EBACE 2019**

The conference sessions you can't miss at this year's event



48



60

42

### **COVER STORY**

### **Aircraft emissions**

How is CORSIA set to impact business aviation operators?

## On the web

• Eric Wells, president of on-demand jet charter service Private Jets Inc., reflects on the FAA's efforts to combat illegal charter operations

• Does business aviation need supersonic jets? Two industry experts put forward their views

For exclusive interviews and industry opinions, visit [www.BusinessAirportInternational.com](http://www.BusinessAirportInternational.com)

## Features

### 14 **Proud president**

Niclas von Planta, the Swiss Business Aviation Association's new president, shares his views on the industry

### 20 **On the rise**

A look into the Japanese business aviation market's potential for growth

### 26 **Space invaders**

How can business airports protect themselves from drone attacks?

### 32 **City focus**

Your guide to flying to London

### 48 **Handle with care**

The latest standards, technology and standards in ground handling

### 56 **Rising star**

*Business Airport International* speaks with Chris Wu, president at Sino Jet Beijing

### 60 **Factory fresh**

Is there enough demand for the influx of new midsize jets?

### 66 **Mountain views**

Courchevel Altiport's manager discusses the unique challenges of leading Europe's highest air transportation hub



## Regulars

- 12 **Meet the manager**  
Get to know Marie-France Memeteau-Broaly, managing director at Space
- 82 **Media stats**  
The latest facts and figures from *Business Airport International*
- 84 **Back chat**  
*Business Airport International* took to social media to find out people's reactions to CORSIA



74

## Profiles

- 71 **Collins Aerospace**  
Flight planning apps have become an integral tool for pilots
- 72 **Medavia**  
Aviation maintenance needs are catered for in Malta
- 73 **Castle & Cooke**  
A look at the company's locations in the USA
- 74 **XLR Birmingham**  
Solent Airport offers a breadth of services for business customers
- 76 **Sky Valet**  
New launch Sky Valet Connect boosts the company's offering
- 77 **Skylink Services**  
Your guide to flying to Cyprus
- 78 **Vinci Airports**  
Customer service is the priority for the operator
- 80 **Bangor International Airport**  
Customs and border protection services are in operation
- 80 **DC Aviation**  
Malta is a perfectly positioned pit stop
- 81 **Mototok**  
The company's tugs can facilitate all business jets
- 81 **Cat Air Service**  
A celebration of five years in operation



78

# Welcome

Since having children, I have become increasingly aware of the impact humans are having on the environment. Pre-kids me was probably a little selfish. I am unlikely to be around to witness the effects of climate change. But the next generation, my offspring included, will live in a world where it impacts their daily lives. Now, I try to be as environmentally friendly as possible through recycling, smart energy use and walking where possible rather than driving.

There is only so much I can achieve on my own, but if everyone makes small changes, then the impact could be much larger. 'Joining forces' is what the aviation world's recently introduced Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) program is all about. It is a global approach to tackling emissions produced from flights and the world's first global carbon market-based measure. It is expected to provide over US\$40bn in funding for climate projects, offsetting at least 2.5 billion tons of CO<sub>2</sub> over 15 years.

The collection and reporting of carbon emissions data for CORSIA started in January, however operators won't be expected to begin offsetting until 2021. Read more on how CORSIA affects the business aviation sector in *Watch my smoke* on page 42.

CORSIA is all about carbon offsetting – aircraft operators are required to offset carbon emissions growth by purchasing carbon credits. In March, ICAO established a set of criteria to govern the types of offsets that can be

used for CORSIA compliance to ensure that they truly bring environmental benefits. ICAO also developed rules to ensure the review process is open and transparent.

There is no doubt that CORSIA is a move in the right direction, but there is concern in the industry that it is too little too late. Tim Johnson, director of the Aviation Environment Federation (AEF), believes that the world has already moved on from carbon offsetting to developing new technologies that cut carbon completely. "We can't just assume that continuous offsetting is going to be sustainable," he says.

Johnson's point was echoed in a recent report by the Transition Pathway Initiative (TPI), which claimed that aircraft operators are not doing enough to curb carbon emissions. Co-chair of the TPI Faith Ward said, "Offsetting is no substitute for a clear strategy to reduce emissions, and the International Energy Agency's carbon budget for air transport excludes the use of offsets."

But while aircraft operators wait for the development and wide-scale roll-out of affordable emission-free aircraft, CORSIA enables them to show their commitment to curbing climate change now. It may be a temporary measure, but it illustrates that the aviation industry is taking climate action seriously. The industry's long-term goal is to halve aviation emissions by 2050 (compared with 2005) through new technology, operations and a transition to sustainable aviation fuel.

**Helen Norman, editor**

**Editor** Helen Norman  
**Associate editor** Hazel King  
**Assistant editor** Kirstie Pickering  
**Production editor** Alex Bradley  
**Chief sub editor** Andrew Pickering  
**Deputy production editor** Nick Shepherd  
**Senior sub editor** Christine Velarde  
**Sub editor** Alasdair Morton

**Art director**  
Craig Marshall  
**Art editor**  
Nicola Turner  
**Design team** Andy Bass, Anna Davie, Louise Green, Patrick MacKenzie, James Sutcliffe, Julie Welby, Ben White

**Head of production and logistics**  
Ian Donovan  
**Deputy production manager**  
Robyn Murrell  
**Production team** Carole Doran, Frank Millard, George Spreckley

**Publication manager**  
Jag Kambo  
**Project manager**  
Tom Eames

**Managing director**  
Graham Johnson  
**CEO**  
Tony Robinson



**MEDIA & EVENTS**  
Published by  
UKi Media & Events, a division of  
UKIP Media & Events Ltd

**Business Airport International**  
Abinger House, Church Street,  
Dorking, Surrey, RH4 1DF, UK  
tel: +44 1306 743744  
email: jag.kambo@ukimediarevents.com

Join our group on **LinkedIn**  
Search for *Business Airport International*

Printed by William Gibbons & Sons Ltd,  
26 Planetary Road, Willenhall,  
West Midlands, WV13 3XT, UK

*Business Airport International* is published quarterly. Annual subscription price is £90/ US\$120. Airfreight and mailing in the USA by agent Air Business Ltd, c/o Worldwide Shipping USA Inc, 155-11 146<sup>th</sup> Street, Jamaica, New York 11434. Periodical postage paid at Jamaica, New York 11434. US postmaster: send address changes to *Business Airport International*, c/o Air Business Ltd, c/o Worldwide Shipping USA Inc, 155-11 146<sup>th</sup> Street, Jamaica, New York 11434. Subscription records are maintained at: UKi Media & Events, Abinger House, Church Street, Dorking, Surrey, RH4 1DF, UK. Air Business is acting as our mailing agent. USPS Permit Number: 4930

The views expressed in the articles and technical papers are those of the authors and are not necessarily endorsed by the publisher. While every care has been taken during production, the publisher does not accept any liability for errors that may have occurred. Copyright ©2019

**abc** Member of the Audit Bureau of Circulations.  
Average net circulation per issue from January 1, 2018, to December 31, 2018, was 8,631

Print publication: ISSN 2042-7212  
Online publication: ISSN 2397-6454



If you wish to cancel your subscription to this magazine please email [datachanges@ukimediarevents.com](mailto:datachanges@ukimediarevents.com). For more information about our GDPR-compliant privacy policy, please visit [www.ukimediarevents.com/policies.php#privacy](http://www.ukimediarevents.com/policies.php#privacy). You can also write to UKi Media & Events, Abinger House, Church Street, Dorking, RH4 1DF, UK to cancel your subscription or request a copy of our privacy policy.



# SIMPLIFYING THE BUSINESS OF FLIGHT



## Keep your eyes on the sky – we'll handle the rest

When your flight operations become complex, Collins Aerospace makes your mission our sole objective. With intuitive end-to-end solutions that make flying more enjoyable, safe and productive, we anticipate your challenges so you can focus on flying.

[collinsaerospace.com/arincdirect](https://collinsaerospace.com/arincdirect)

### ARINC DIRECT<sup>SM</sup> FLIGHT AND CABIN SOLUTIONS

- Comprehensive flight planning
- Cabin and flight deck connectivity solutions
- International trip support
- FOS<sup>®</sup> scheduling
- Competitive fuel services



**Collins Aerospace**

© 2019 Collins Aerospace, a United Technologies company. All rights reserved.

## SEA PRIME TO OPEN US\$5.7M TERMINAL AT MILAN MALPENSA AIRPORT



**S**EA Prime is preparing to launch its €5m (US\$5.7m) terminal dedicated to business and general aviation at Italy's Milan Malpensa Airport this June. The new VIP terminal building, called Milano Linate Prime, will feature state-of-the-art facilities for both passengers and crew, covering a total surface of 1,400m<sup>2</sup> (15,070ft<sup>2</sup>). The terminal's futuristic polyhedral shape is designed to reflect the structure of a gem.

There will also be a dedicated apron and a 110-space parking lot. An adjacent 5,000m<sup>2</sup> (53,820ft<sup>2</sup>) hangar has been renovated to host executive jets, and a full range of dedicated services will be provided directly or through SEA Prime's partners.

Chiara Dorigotti, general manager for SEA Prime, says, "At Milano Linate Prime, we feel we have the perfect ingredients with a dedicated general aviation terminal, 10 hangars and the full range of services for business passengers and aircraft. For these reasons, the new dedicated terminal of Milano Prime in

***"The well-being of passengers and crews was the main focal point of the design"***

Giuliana Ledda, design leader and associate director, OneWorks





### Milan Malpensa Airport

**Location:** Milan, Italy  
**Opening hours:** 24/7  
**Runway length:** 3,920m  
 (12,860ft)  
**Distance from Milan:** 7km  
 (4 miles)

Left: The single-story building structure resembles that of a gem

Below: The terminal's exterior has been designed for a modern and luxury finish

### New at Linate

SEA Prime is also updating its service offering at Milano Linate Prime with the opening of new lounges scheduled for this year. The lounges will span 300m<sup>2</sup> (3,230ft<sup>2</sup>) and will strive to make passengers and crews as comfortable as possible as they wait for their flight. Infrastructural development and investments at Milano Linate Prime Terminal will also continue into 2020 with the construction of new hangars.

More than 16,700 business and general aviation flight movements were recorded at the site in the first nine months of 2018, up 2.1% compared with the same period in 2017.

Malpensa is the natural development for our company, creating a brand-new iconic infrastructure adjacent to a hangar in an airport representing the gateway to locations like Switzerland and Lake Como."

The site is a joint effort between the company's in-house infrastructure management, global design and consultancy firm OneWorks – which is in charge of the project – and De Vincenzo, a construction firm that was awarded the tender for the general aviation terminal work. The apron and parking works have been awarded to Gencantieri, another construction company. The construction works started in September 2018.

Giuliana Ledda, design leader and associate director at OneWorks, comments, "The terminal is a single-floor building designed to offer guests maximum freedom and assistance from arrival to departure. Great attention was given to the view of the building from above, with the shape, color and coating material created with consideration of the perspective of both the pilots and passengers on board an incoming or departing airplane.

"The effect we want to convey is that of a compact volume and the presence of the new terminal from both the ground and in flight. The building is covered in panels of painted aluminum sheets with a mother-of-pearl gray to provide a unique glossy and mirroring effect. This also provides a contrast with the dark color of the external covering to give more light to the entrances for welcoming passengers."

From the lobby, passengers enter the security checkpoint through a glass wall with sliding doors.

### Hangar deal

Cagliari-based Sardinian Sky Service has signed an agreement to base its aircraft at the Milan Malpensa Prime hangar space, additionally working from offices within the structure. The company – which also has a base in Cairo, Egypt – will operate three Cessna Citation XLS aircraft from the hub. Sardinian Sky Service's offerings include corporate and charter transportation worldwide; the management of private and commercial aircraft; brokerage for the acquisition of aircraft; and consulting and logistical support for air transportation.



## ARRIVALS LOUNGE



The modern design supports a luxury customer experience

Situated here are also the offices of the state authorities responsible for the control of departing and arriving passengers. They are positioned at the center of the flows to ensure control over all movements in the terminal without creating bottlenecks. The new terminal will also feature five lounges, which SEA Prime partners will have the opportunity to personalize.

"When developing the terminal building, the well-being of passengers and the crews was the main focal point of the design," says Ledda.

"The ultimate objective for the client, and us as designer, was to welcome customers into a state-of-the-art building that was in line with some of the world best terminals, but at the same time offer a highly functional environment that provides travelers and crew an opportunity to feel completely relaxed and comfortable."

SEA Prime's Dorigotti adds, "I feel the new complex will be an accomplishment for all of us, capitalizing on experience, best practice, and what we have learned so far, motivating us to strive for further future developments. For SEA Prime, the investment means further consolidation of its position as market leader in Italy and one of the top players in Europe. This is additionally consistent with the positioning of Milan in Europe."

"Milan is the European capital of contemporary luxury and fashion, attracting visitors with top-quality international events such as Milan Design Week, La Scala Opera Season, Milan Fashion Week and the Formula 1 Grand Prix. Milan has been increasing its position in international rankings, making it one of the preferred places to visit or to live in."

"This is also thanks to its position in the heart of Lombardy, making it the gateway to mountains, lakes, and archaeological and artistic sites. We feel lucky to be here." ○

***"The new investment means further consolidation of SEA Prime's position as market leader in Italy"***

Chiara Dorigotti, general manager,  
SEA Prime

Above: The lounge offers a relaxing space before departing on a flight

Below: A rendering of the landside view of the new terminal



# *Castle & Cooke* AVIATION

Visit us at  
EBACE2019  
Booth E89

Nonstop excellence.  
Nonstop elegance.



KVNY - Van Nuys, CA

PHNL - Honolulu, HI

KPAE - Everett, WA

Fuel ■ Ground Handling ■ Catering ■ Hangar Storage ■ Customs

CastleCookeAviation.com | (818) 988-8385





## NBAA REVEALS ITS TOP SAFETY FOCUS AREAS FOR 2019

### Reducing the risk of loss of control in flight

Accidents of this nature result in more fatalities throughout general aviation than any other category of accident.

The National Business Aviation Association (NBAA) has released its annual list of top safety focus areas, addressing the most pressing issues facing the broad array of business aviation operations. To determine the focus areas, the NBAA Safety Committee evaluated accident and incident statistics, operational safety data and robust hazard-reporting information.

*Business Airport International* explores the safety issues on NBAA's radar for 2019.



### Improving the safety performance of single-pilot operations

Single pilot aircraft are 30% more likely to be involved in an accident than aircraft with dual-pilot crews. Single-pilot operations are more susceptible to task saturation and when this increases, so too does the number of errors. The Safety Committee is providing pilots with tools and training such as its Single-Pilot Safety Standdown event and extra resources.

### Reducing the risk of runway excursions

Operators can prevent most runway excursions by mitigating well-identified hazards, including adhering to stabilized approach and landing criteria, and using accurate and timely runway condition data.



### Reducing the risk of controlled flight into terrain (CFIT)

CFIT has occurred in more than 15% of general aviation accidents and fatalities. Enhanced ground proximity warning systems and other ground collision avoidance systems are capable technological solutions, but not all aircraft are equipped. NBAA is pushing for more scenario-based training.

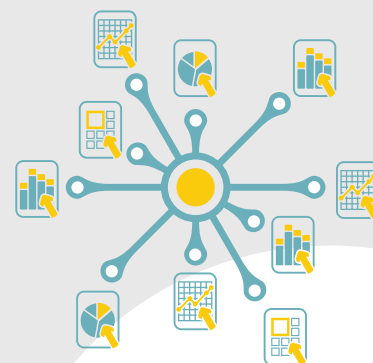
### Reducing the risk of aircraft ground operation and handling incidents

In business aviation, many more aircraft suffer damage on the ground than in the air. Aside from the personal safety risk, this can be expensive and hinder future flight operations. NBAA recommends the adoption of robust safety-management systems for all operators and FBOs.



### Improving defenses against automation mismanagement

Aircraft and avionics manufacturers have developed tools to enhance situational awareness, ATC communications, aircraft control and aircraft system management. To take advantage of this technology, crew must have a full understanding of all modes and capabilities that this technology offers, as well as the training to understand when it is not producing the desired outcome.



### Increasing the use and sharing of human-reported and automated safety data

In a survey conducted by the NBAA Safety Committee, only 45% of association members said they participate in automated safety data sharing. The Committee is developing tools to promote the use and sharing of data among business aircraft operators not already doing so.





skylink



# Skylink



Skylink Services Ltd is part of the Skylink Group Companies. The company is well established and provides ground handling services for General Aviation Aircraft in Cyprus. We began operation in 1992, filling the gap in the Executive Aircraft ground handling market at both international Airports in Cyprus, Larnaca and Pafos.

Larnaca International Airport | P.O.Box 43012, CY 6650 Larnaca, Cyprus  
Tel +357 24 84 09 00 | Fax +357 24 66 58 05

**24hr Operations**

Tel +357 24 64 33 34 | Fax +357 24 64 35 99  
Email: [flightops@skylink.com.cy](mailto:flightops@skylink.com.cy)



### EBACE key facts

- **When:** May 21-23, Geneva, Switzerland
- **More than 400 exhibitors,** covering 40,000m<sup>2</sup>
- **50+ business aircraft in an** 18,000m<sup>2</sup> static display
- **10+ education sessions**

## BUSINESS AIRPORT INTERNATIONAL PICKS ITS MUST-ATTEND SESSIONS FROM THE RECENTLY RELEASED EBACE 2019 PROGRAM SCHEDULE



Left: The  
Zunum Aero  
hybrid electric  
aircraft

### Flying future: Electric propulsion and business aviation

**When:** Tuesday, May 21, 3:30pm  
**Where:** Innovation Zone

Work on the development of electric jets has gained momentum in recent years, but there are still many challenges to be overcome. This session will look at how the business aviation community can position itself to take full advantage of the opportunities that cleaner air travel will bring. Some players have already expressed their commitment to electric aircraft. Charter provider JetSuite, for example, announced last year that it plans to purchase up to 100 of the Zunum Aero hybrid-electric aircraft, which could enter service in 2022.

### Crisis communications: Practical tools that could save your company

**When:** Wednesday, May 22, 10:00am  
**Where:** Hall 3, Room Q

In this session, EBAA launches its crisis communications manual. It is essential that companies develop a thorough management plan to help them react fast and in the correct way if a crisis happens. EBAA's Safety Committee developed the manual working closely with its Communication Advisory Board. The manual will be distributed during the session and will provide critical insight for anyone who has a role in managing a communications crisis in their organization.

### Artificial intelligence and business aviation

**When:** Wednesday, May 22, 3:00pm  
**Where:** Innovation Zone

This session will look at how AI can redefine how the business aviation industry works. It will share insights from experts at IATA, Thales and GlobeAir. Thales is a leader in the use of AI. Today the company has nearly 50 AI experts working in Canada and another 150 at its major research centers in France. AI has the potential to reduce the cognitive load on business aviation pilots, simplify ATC communications, streamline ground operations, and improve the customer experience.

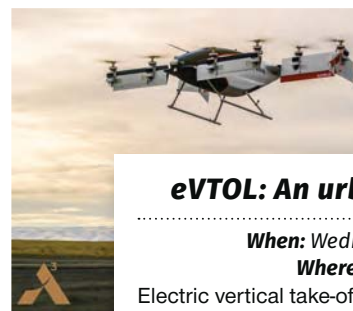
### Social responsibility: What role can business aviation play?

**When:** Tuesday, May 21, 4:30pm  
**Where:** Hall 3, Room Q

Business aviation makes a great contribution to wider society thanks to its ability to reach remote locations. It is not just about executive, celebrity and high-net-worth individual flights. Companies and individuals throughout the industry carry out medical, rescue and humanitarian aid flights. This session will address how business aviation continues to support communities and governments in fulfilling critical missions that benefit and save lives.



Left: FBO Million  
Air at Houston  
Hobby Airport  
became a relief  
collection location  
during Hurricane  
Harvey in 2017



Left: Vahana  
by Airbus's  
innovation  
division A<sup>3</sup>

### eVTOL: An urban mobility solution

**When:** Wednesday, May 22, 1:00pm  
**Where:** Innovation Zone

Electric vertical take-off and landing (eVTOL) aircraft are set to have a big impact on the business aviation sector. This session will present why eVTOL promises to be a disruptive technology, who the key players are, and the potential timeline for launch. As part of this session there will also be an interactive panel discussion focusing on the aircraft, their capabilities and operational considerations. One of the jets discussed will be the Vahana all-electric VTOL aircraft from A<sup>3</sup> by Airbus, which is currently in the testing phase. ○





27 PREMIUM  
EXPERIENCES

FRANCE  
SPAIN  
PORTUGAL  
ITALY  
BULGARIA

  
**SKY VALET**  
SUR MESURE. RELIANCE



# Marie-France Memeteau-Broaly

GET TO KNOW THE MANAGING DIRECTOR OF **SPACE**,  
AN FBO AT LYON-SAINT EXUPÉRY AIRPORT IN FRANCE

## What was your career path to your current role?

After my master's degree in air transport, I started my career as a consultant in a flight support company. I was in charge of writing procedures for operations manuals for airlines we worked with. This experience enabled me to gain a solid background of all procedures and legal aspects in air transportation.

After that, I worked for a few years for two airlines as a legal and quality manager. After the second airline closed down, I set up my own business as consultant in quality management for airlines and some clients asked me if I could take care of their station at Lyon-Saint Exupéry Airport. That's how I started the operational part of my business. I soon realized there was no adequate service for private and business aircraft at Lyon-Saint Exupéry Airport, so I set up an FBO department in my company and 12 years later we still deliver the best executive and VIP service at Lyon-Saint Exupéry Airport.



## What is best about your job and why?

The best parts are the daily challenges and the variety of things I do, such as team management, financial and commercial aspects, and meeting with authorities. I really enjoy working with my team and seeing every effort they make to provide the best service to our customers in every possible circumstance.

## What services do you offer at Lyon-Saint Exupéry Airport?

We offer full ground-handling services, from passenger and crew assistance, to VIP and crew concierge services, including ambulance flight and cargo handling. Our aim for our customers is to do whatever it takes to make their lives easier, but we can do much more.

## How do you stand out from competitors?

We provide a top-level and highly reliable service. We aim to build strong relationships with crews so that we get to know them well and meet their needs, in addition to those of their passengers. Most of our staff have been with us a long time. They are experienced and we train them regularly in security, safety and ramp services, to maintain a high level of quality.

## What is your dream holiday destination and what aircraft would you choose to fly there in?

I would love to charter a Gulfstream VI for a world tour with my family to visit and discover other countries and cultures in all their diversities. I have been lucky enough to have visited many countries around the world and I always enjoyed it and have had many wonderful experiences.

## What makes a successful FBO?

I think a successful FBO should offer convenience and a premium service, both of which SPACE offers. A reliable and dedicated team that shares your working ethos is also very important.

## What does the future hold for SPACE?

We are always adding more services for our clients. We are currently developing a service dedicated to ambulance flights to meet their very particular needs. ○

***“A successful FBO should offer convenience and a premium service, both of which SPACE offers”***



Above: **SPACE** offers full ground-handling and FBO services

Right: **The SPACE crew lounge** at Lyon-Saint Exupéry Airport





DC AVIATION

PASSION FOR EXCELLENCE

# THE HOME OF PRIVATE AVIATION AT THE SPEED OF BUSINESS

Passion for excellence is our trademark. In everything we do, our goal is to meet and surpass your expectations. Our highly trained staff are always on hand to ensure your complete satisfaction, both on the ground and in the air. Our unrivalled facilities located at Dubai World Central guarantee your utmost discretion, comfort and convenience every time you fly.



Aircraft  
Hangarization



Aircraft  
Maintenance



Aircraft  
Management



Consulting  
Services



Executive  
Charter



FBO & Handling  
Services

T: +971 (0)4 870 1800 | [www.dc-aviation.ae](http://www.dc-aviation.ae) | An Al-Futtaim Joint Venture  
Al Maktoum International Airport | DWC | Aviation District | Dubai, UAE



***“I plan to make Swiss business aviation a leader in Europe and the world by ensuring our market remains as attractive as possible”***



Niclas von Planta, the new president of the Swiss Business Aviation Association and vice president at ExecuJet Europe, tells *Business Airport International* about his professional goals, how technology is impacting the industry, and the strength of the Swiss market

Words | Kirstie Pickering

# *Proud to be* **president**

**H**ow did your career develop leading up to becoming president of the SBAA?

I graduated from the University of Basel in Switzerland with a master's in law in 2000 and I then began working for a leading business law firm in Zurich. In 2005 I participated in an LLM [Master of Laws] program at the Air and Space Law Institute of McGill University in Montreal, Canada, from which I graduated in 2006. I continued working at the Zurich law firm for nearly eight years as a senior associate.

I began my career at ExecuJet in 2011 as the European and Group director of legal services. I was also a member of the Group and European Management Committee. In 2014 I was promoted to European vice president. My role is to lead the company's operations throughout the region with three AOCs in Switzerland, Denmark and the UK, as well as nine FBOs across Europe.

[www.milanoprime.it](http://www.milanoprime.it)

The excellence  
of business aviation  
is in Milano.



- FBOs
- 11 Hangars
- Lounges
- Business Center
- Concierge
- Restaurant

With over 50 years of heritage, Milano Prime embodies the excellence of business aviation in Milano, one of the top touristic and business destinations in Europe. New infrastructures, hangar spaces and top services are the trademarks of Milano Prime.

**Milano Prime**

THE LUXURY AIRPORTS





### Switzerland in numbers

Geneva Airport is the second-largest international airport in Switzerland and has the highest level of business aviation activity in the country, with an average of 46 departures per day. Zurich is the country's largest international airport and second-largest business aviation airport, serving 29 daily departures on average. Business aviation accounts for 17.6% of flights departing from Switzerland. In 2017, 45,943 business aviation flights departed from the country, with the UK being the top destination, with 10,906 flights. The mean time saving offered by business aviation over the fastest commercial alternative for flights, where either the origin or destination was Zurich, was 175 minutes. For Geneva, the figure was 188 minutes.



#### Why does business aviation interest you?

Business aviation is such a challenging and exciting industry to be involved in, with no two days being the same. It plays such an important and critical role in driving economic growth, jobs and investing in infrastructure, which is what makes the industry great.

#### How did the opportunity arise to be named president of the SBAA?

My job at ExecuJet enables me to meet and network with various other operators at airports in Switzerland, Denmark and the UK. It was through networking at Zurich Airport that I met Helene Niedhart, founder of CAT Aviation and SBAA vice chairman and treasurer. Helene and I have a lot in common due to our love of the aviation industry, and that is how I first heard about the opportunity at SBAA.

I feel honored to have been chosen as president of the SBAA and I look forward to bringing my experience of the industry to my new role.

#### What are some of the key issues you hope to tackle as president?

I plan to make Swiss business aviation a leader in Europe and the world by ensuring our market remains as attractive as possible. This will mean tackling the current big issue, which is the regulatory and tax environment.

Across the entire business aviation industry, we're seeing a big push from EASA for greater safety. This is key to our ethos and an area that is regularly tested. However, meeting standards can be expensive, which is causing some smaller operators to look to global companies like Luxaviation Group for support.

These and other costs are driving the industry toward increased consolidation. This is an area I'm keen to investigate further, as while consolidation may be a positive thing for the industry overall, it is a problem if smaller operators are pushed toward it as a result of narrowing profit margins.

#### What is the first thing on your to-do list as president?

The first thing I plan to do is host a workshop with all the SBAA board members to discuss our objectives and communication strategies for the coming year and beyond. This is very important as it will allow everyone to be aligned with one another so that we can really work as a team to reinvigorate Swiss business aviation.

***"Switzerland is exceptionally well connected to the rest of the world, which is why we see multinational companies relocating here"***

Top: Zurich is a crucial entry point for visitors of the annual World Economic Forum event

#### What is unique about the Swiss business aviation market?

The Swiss business aviation market is the fifth biggest in Europe. Switzerland is home to two of the busiest airports for business aviation in Europe – Geneva and Zurich – which have been named the third and sixth busiest.

Switzerland is exceptionally well connected to the rest of the world, which is why we often find multinational companies choosing to relocate their headquarters here.

This helps drive the business aviation market and explains the 36 Swiss airports serving business aviation.

#### How is the Swiss business aviation market performing at present?

The market is doing very well. The most popular business airports in Switzerland are Geneva and Zurich. In Zurich there are a total of 79 business aircraft and helicopters [19% of the nationwide figure], generating around 550 direct jobs with aircraft operators. Along with 65 jobs in FBOs and 158 employees in the MRO segment, the business aviation market employs around 780 people in and around Zurich. The region accounts for 18% of all Swiss employees in the business aviation value chain.

In Zurich, over a one-year sample, business aviation added 436 destinations of point-to-point connectivity – an increase of 525% – compared with regularly scheduled non-stop commercial aviation that connects Zurich to 83 destinations in Europe.

Geneva is even more important for business aviation in Switzerland than Zurich. Of the Swiss business aviation fleet, 22% is currently based in Geneva, generating 540 jobs in MROs alone. This particular region accounted for 1,226 direct jobs in 2017, which yields about 4,700 total employees along the value chain. This represents 26% and 2.5% of the national and European totals.

In Geneva, over a one-year sample, business aviation added 461 destinations of point-to-point connectivity – an

increase of 659% – compared with regularly scheduled non-stop commercial aviation that connects Geneva to 70 destinations within Europe.

**How do you predict the Swiss business aviation market will progress over the next year?**

Business aviation is on the rise and Switzerland will remain a key market. This is helped by the region's ongoing investment in infrastructure – such as hangars and FBOs – which will support a rise in movements, although this will need to be increased at a higher rate to meet demand.

In Switzerland there are two main military airports – Payerne Airport and Dubendorf Airport – that have been discussing and investigating the opportunity of becoming more accessible for business aviation. Dubendorf Airport would be able to assist in relieving traffic from Zurich Airport, and Payerne Airport would enable business aviation to support business in the region between Bern and Geneva.

We're also seeing a drive to make Lugano Airport even more accessible for business aviation. The airport is in a great location as it is situated in the Ticino region of Switzerland.

Switzerland hosts a number of key events such as Art Basel and the World Economic Forum. These events bring a considerable increase in the number of people who arrive in Switzerland and I can only imagine that this will continue to increase.

**What do you believe makes a good customer experience in business aviation?**

In business aviation, anticipating a customer's needs and delivering a great service is a must and will help to establish customer loyalty if done correctly. Passengers who fly privately want to know they are getting a personalized, tailored service while experiencing high safety standards. Most passengers who choose to fly privately are looking for



Above: ExecuJet has extensive hangar space at its hub in Zurich

an efficient and speedy experience. This is something that business aviation is very good at promoting and practicing. Another important aspect would be privacy and discretion.

**What key challenges does the business aviation industry face over the next few years?**

Pilot and crew shortages are the obvious challenges.

According to Boeing's 2018 Pilot & Technician Outlook, the industry is looking at a demand for 790,000 pilots over the next two decades and 754,000 additional maintenance technicians.

The price of fuel is another challenge, although it's not the highest it has been. Since 2015 we have seen a year-on-year increase in fuel costs and we expect this to continue over the next few years.

There has also been a rise in the number of passengers in commercial and business aviation over the past few years, as both industries have become more accessible.

This increase will certainly put pressure on the infrastructure currently in place.

Technology will be another challenge. We're a highly bespoke industry that relies on the human touch. It will be difficult for business aviation to deliver services digitally – for example, a 'click, book, fly' solution – while retaining this personal feel.

At the same time, we are witnessing tighter regulatory and tax regimes that are putting pressure on smaller operators. Many of these schemes are designed to improve safety – which is a great step – but they also narrow profit margins for small companies.

***“It will be difficult for business aviation to deliver services digitally while retaining the personal feel”***

**EBACE 2019**

The static display at this year's EBACE (May 21-23, Geneva, Switzerland) will host recently and soon-to-be-certified business aircraft, including long-range intercontinental business jets such as Bombardier's Global 7500, the Gulfstream G500 and G600, and the super-midsize Cessna Citation Longitude. These aircraft will be joined by the latest offerings from European manufacturers such as Airbus, Dassault Falcon Jet and Pilatus.

Sustainable alternative jet fuels (SAJF) are expected to be a key focus at the event. This year, business aviation stakeholders will recognize the 10<sup>th</sup> anniversary of the Business Aviation Commitment on Climate Change, which identified SAJF – among other initiatives – for further reducing overall emissions in business aviation.

In conjunction with EBACE 2019, the first European SAJF demonstration day will be held on May 18 at Tag Farnborough London Airport. And on May 21 – EBACE's opening day – there will be an SAJF-focused technical panel discussion held at 2:00pm in the EBACE Innovation Zone.

“EBACE is a key event for the Swiss business aviation market,” says SBAA president Von Planta. “The event is held once a year, and sees Geneva become the center of business aviation for Europe. The increase of traffic to Geneva also highlights the infrastructure available, the attraction of the destination and the capabilities of Geneva Airport.”

**How do you see the business aviation sector progressing over the next decade?**

We will definitely see an increase in the number of long-range and ultra-long-range jets. We're already seeing Bombardier and Gulfstream in the race for the longest-range business jet on the market. We'll see more airports needing to expand to keep up with current and future demand. It will be exciting to see who comes out on top.

As the business aviation industry becomes more accessible to wider audiences, we will also see a steady increase in the number of first-time flyers and a particular focus on digital personalized experiences, where you will be able to click and book an aircraft via your phone and tailor your experience – such as inflight food – accordingly. Soon there will be the option to have your entire route planned from start to finish. This will be a point-to-point experience, including not just helicopter or limousine transfers, but also your hotel, onward travel and other aspects of your trip. It will certainly open up business aviation to more people once these experiences are implemented. ○



# VINCI AIRPORTS

## EXECUTIVE HANDLING

---

WHEN DETAILS MAKE PERFECTION

// CHAMBÉRY // CLERMONT-FERRAND // GRENOBLE  
// LYON-BRON // LYON SAINT-EXUPÉRY // TOULON

# *On the rise*

The Japanese business aviation market holds great potential for growth, but strict regulation and a negative perception of the sector threaten to hold it back

Words | **Helen Norman**

**A**lthough demand for business aviation in Japan has been increasing year-on-year, the industry is yet to really take off, according to the Japan Business Aviation Association (JBAA). The sector is currently small and faces many challenges limiting growth, including strict regulations, a perception that business aviation is a luxury and not a necessary expenditure, and limited on-the-ground facilities developed specifically for business jets.

However, many companies active in the sector are working to overcome these challenges. The country's business aviation industry will also receive a boost thanks to a number of international events coming up, such as the Rugby World Cup in September 2019 and the 2020 Summer Olympics in July and August 2020.





## Business aviation facilities in Japan

### Tokyo Haneda

**Operating hours:** 24/7

**Facilities:** The Business Aviation Gate provides an exclusive corridor and dedicated customs, immigration and quarantine (CIQ) facilities for business aviation customers. It has a check-in counter, lobby, private lounge and parking.

### Tokyo Narita

**Operating hours:** 24/7

**Facilities:** The Business Aviation Terminal, Premier Gate, provides CIQ facilities exclusively for the use of VIPs using business jets. It also has a spacious lounge and ample car parking for easy access to the facility.

### Chubu Centrair International

**Operating hours:** 24/7

**Facilities:** The Business Jet Terminal offers ground handling, concierge services, a VIP lounge, catering and refueling for Jet A-1 fuel. Immigration can be carried out quickly through dedicated lines – this must be coordinated ahead of time with the organizations involved.

### Kansai International

**Operating hours:** 24/7

**Facilities:** The Premium Gate Tamayura offers a security checkpoint, CIQ, drop-off and pick-up area, car parking lot, reception desk, lounge and meeting room. Applications are due by noon on the day before the desired date of use.





## New business aviation company launched in Japan

In January 2019, Japan Airlines (JAL) teamed up with the Marubeni Corporation to launch a new business jet company called JAL Business Aviation. The aim of the new company is to provide logistical support for charter operators in the country and to help assist the growth of the sector. Services will include arranging charter flights, managing privately owned aircraft, and providing operational and concierge services to business jet operators and to customers flying to Japan. The companies aim to start the service during the spring of 2019.

Speaking to *Business Airport International*, Masato Kunezaki, senior director of Japan Airlines, says, "The company will mainly operate at Tokyo's metropolitan area, but has capabilities to operate from JAL's local airports in Japan. For charter flight arrangements, we will target affluent top/middle management company executives and government officials. For operational support and concierge services, we look to offer our services to business jet operators in Japan and abroad."

It is hoped that the new company will contribute toward the economic rejuvenation and development of Japan by offering services and products that will maximize the customers' time spent traveling, utilizing JAL's worldwide network and Marubeni's business knowledge in the aviation field. "In general, the Japanese market is inexperienced in utilizing business jets when compared with other economically advanced countries. With this in mind, there is a potential for future growth in this unique market. We hope JAL Business Aviation will help with this growth."

Hiroshi Higashiyama, managing director of JBAA and a representative director of Universal Aviation in Japan, says, "Both the government and the private sector are working toward better accommodating business aviation ahead of these events. The expansion and better utilization of slots for business jets in Tokyo is one of the main aims. Although no specific developments have been decided yet, we have had several meetings with the government to discuss how we can receive guests coming by business jet."

To help support the Japanese business aviation sector during these events, AsBAA, Asia's non-profit representative body for the business and general aviation industry, signed an MoU with JBAA to work closely together to leverage the opportunities for the Asian business and general aviation sector. Keisuke Okada, chairman of JBAA, explains, "Japan is a huge market with great potential. There are many challenges ahead that need to be addressed, however we are confident that the MoU will improve mutual understanding, leading to swifter solutions."

Higashiyama adds, "JBAA, AsBAA and their members will work together to ensure that the needs of the business aviation community are heard in relation to upcoming high-profile events. It is our responsibility to help pave the way for future growth by ensuring the authorities also plan for business aviation when embarking on new infrastructure enhancements at airports."

Another development, which is expected to give the business aviation market in Japan a boost, is Honda Aircraft Company starting to deliver its HondaJet Elite

Above: JAL Business Aviation will provide logistical support for charter operators

Right: Executives from AsBAA and JBAA signing an MoU for closer cooperation between the two IBAC member associations





to the industry. In December 2018, the company delivered its first Elite to Kotaro Chiba, founder of Japan's Drone Fund.

"It has been our dream to see the HondaJet flying in the skies above Honda's home country of Japan, and we are proud to mark this major milestone for Honda's aviation business," explains Michimasa Fujino, president and CEO of Honda Aircraft Company. "Honda Aircraft Company's goal is to improve people's lifestyles throughout Japan by introducing them to business aviation with the HondaJet Elite. We aspire to popularize business aviation in the region, ultimately creating a society where jets are widely accepted and used for personal and professional use."

Higashiyama adds, "Honda is a much-loved company in Japan and people love the spirit of the founder Honda Soichiro. It was his dream for Honda to develop a jet. We believe that the beginning of sales of the HondaJet Elite in Japan will be a spark for business aviation and the improvement of its operating environment."

### The Japanese market

In 2016, there were 57 business aviation aircraft registered in Japan. This number fell to 53 in 2017. However, HondaJet is due to deliver 10 new aircraft to Japanese customers

Below: **The Japanese government is improving business aviation conditions in Tokyo by making more slots and parking spaces available for jets at the city's main airports**

***"JBAA believes that all the primary international airports in Japan should have a GA terminal and they should be allowed to develop FBOs"***

Hiroshi Higashiyama,  
managing director of JBAA

in 2019, so this figure looks set to increase. According to Higashiyama, despite registered aircraft figures decreasing, business aviation movements are on the up. "Official data shows us that there were 15,351 movements, including flights into/out of Japan and both domestic and international flights, in 2017. This compares with 11,250 movements in 2010," he explains.

Although there are no specific business aviation airports and no FBOs in Japan, some work has been carried out to better accommodate the increasing number of business jets visiting Japan. "The government has gradually backed the business aviation market," says Higashiyama. "Examples include the increased accommodation of business aviation at Tokyo's Haneda and Narita airports. Narita [RJAA] opened a facility dedicated to GA operations called Premier Gate in 2012 – it was the first of its type in Japan. This was followed by Haneda [RJTT] opening a similar facility called Business Aviation Gate in 2014. Both airports provide GA ramp areas, exclusively for GA parking and refueling. Parking is allowed for GA at RJTT for five days and at RJAA for 30 days."

There is also a business jet facility at Kansai Airport and a business aviation terminal and lounge at Chubu Centrair International Airport.

The latest development to open was the Premier Gate Tamayura dedicated business jet facility at Kansai Airport, which opened its doors in June 2018. The facility enables business aviation passengers, who are currently using general immigration facilities in the airport's Terminal 1, to enjoy a smoother screening process with a higher level of privacy.

According to Higashiyama, more business aviation facilities are needed in the country. "JBAA believes that all the primary international airports in Japan should have a GA terminal and they should be allowed to develop FBOs. Currently the airports and their land are owned by the government or airport authorities. These entities do not place any importance on catering for business aviation. They believe airports are mainly used for public transportation so GA has no priority. The ultimate goal is for an airport to be developed that has GA exclusively, but this would be extremely difficult to achieve in the current market."

### Future growth

According to Yousuke Nishida, corporate officer at Japan Aviation Service company, the oldest business aviation handling company in Japan, people's perceptions of the business aviation market are starting to change and this will drive future growth. He explains more, "In Japan, business aviation is no longer considered a means of transportation only for a limited population, but it is now recognized as a business tool for a wide range of business owners and executives."

However, a number of challenges are still present in the current market, which JBAA's Higashiyama believes need to be addressed. "The scheduled airline services are still given priority in Japan and I believe many still consider the use of business aviation as a luxury. Furthermore, due to the fact that there aren't many GA aircraft registered in Japan,



insurance for GA jets is much higher than in other countries. These negative factors create tough market conditions.”

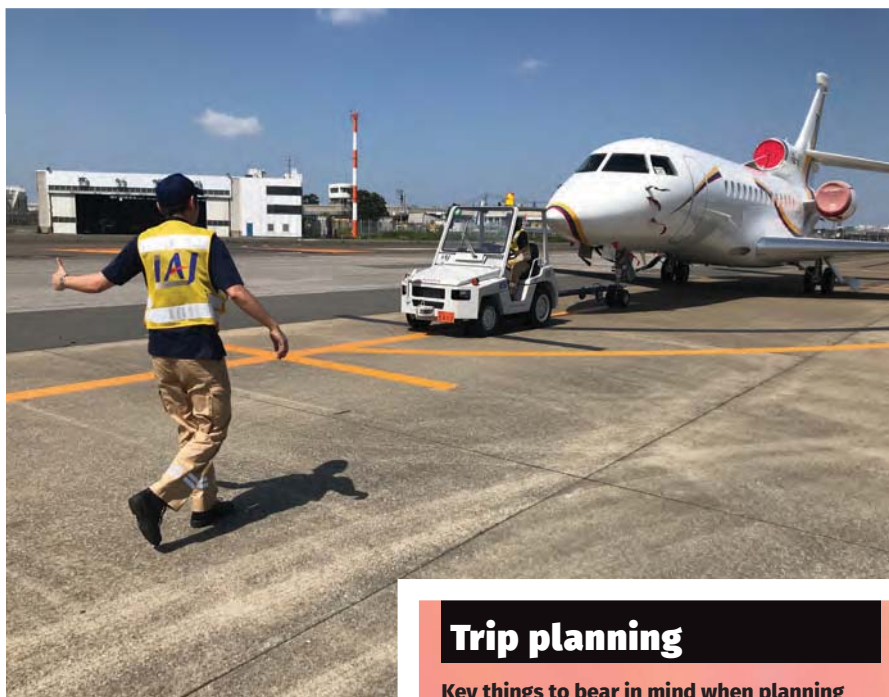
Some improvements have been made in the sector, according to Kazuyuki Tamura, vice chairman of JBAA: “The Japan Civil Aviation Bureau [JCAB] is trying to expand and improve landing slots and parking spaces at metropolitan airports. Haneda and Narita airports are working hard in this area to help them prepare for the Summer Olympic Games. However, the business aviation sector in Japan needs to continue to work closely with JCAB to further relax regulations and improve on the ground infrastructure.”

Higashiyama continues, “Current aeronautical law was established in 1952 and has been revised frequently. However, JBAA believes this law should be fundamentally reviewed and revised to match current market demands. For example, cabotage is not permitted, even by GA operations, and the permit for non-revenue domestic GA operations basically requires a three-day advance application. There are a huge number of documents and explanation required to get a permit for Part 135 Charter.”

One company that is working hard to improve the business aviation services on offer in Japan is InterAviation Japan (IAJ), which provides comprehensive ground handling and VIP support services at airports across the country. Ben Hada, client service and accounts manager at IAJ, says, “One of IAJ’s priorities is to establish a one-stop service to support our customers’ entire trip to Japan. Services shouldn’t stop at the airside, with just flight support and ground handling. On the contrary, they should also cover landside services such as ground transportation, hotels, sightseeing tours, and conference rooms. From the customers’ perspective, IAJ will be the single portal that can take care of everything required to ensure a successful, productive and enjoyable trip to Japan.” IAJ recently joined the T-Life Holding and Taihei Group of travel service companies significantly expanding its range of service capabilities.

Like Nishida and Higashiyama, Hada believes that regulatory reform is needed to help the business aviation sector grow, although he does acknowledge that work is underway. “Tokyo’s airports are expanding the number of parking stands and slot availabilities for business aviation. CIQ [customs, immigration and quarantine] services at business jet terminals are becoming more accommodating, which is crucial to the development of business aviation,” he explains. “Automated CIQ formalities for business aviation would boost flexibility very much since CIQ offices have limited human resources that they tend to apply to scheduled flights.”

Nishida at Japan Aviation Service believes that the ultimate aim for the business aviation industry in Japan is to develop its first exclusive business aviation airport. He concludes, “Many airports in Japan are currently in the process of being privatized. This could ultimately revolutionize business aviation in Japan and result in more investment in infrastructure.” ○



Above: InterAviation Japan is working to expand its ground-handling capabilities to more airports around Japan

**“CIQ services at business jet terminals are becoming more accommodating, which is crucial to the development of business aviation”**

Ben Hada, client service and accounts manager, InterAviation Japan

## Trip planning

**Key things to bear in mind when planning a trip to Japan**

**Ben Hada, client service and accounts manager, InterAviation Japan**

“It is very important to keep in mind the lead time necessary to arrange permits, slots and paperwork in Japan. Choosing the right handler who is flexible, responsive, multicultural and customer-oriented should be considered as well.”

**Hiroshi Higashiyama, managing director, Japan Business Aviation Association**

“If the aircraft operates under Part 91 [non-revenue], a permit is not required for international business aircraft operations. If it is Part 135 [charter], a permit is required. Regardless of non-revenue or charter, a domestic operation permit is required if a foreign-registered aircraft operates between Japan airports. The lead time for the application is three days before the operation, and 24 hours prior for urgent business purpose. Slots and parking spots must be secured during the period of stay prior to application of the permits. Hangar spaces for business aviation are only available at Narita and Chubu airports.”

**Yousuke Nishida, corporate officer, Japan Aviation Service**

“Securing slots and parking is the most important thing to consider. Each airport is run by different rules, therefore it is important to check relevant rules at the time of flight planning. For example, at Haneda Airport, the maximum aircraft parking is limited to five days. If a longer duration is required, then you need to move your aircraft to another airport. At Chitose Airport, there are operational restrictions depending on the nationality of the aircraft.”





# TOTAL FLIGHT SUPPORT TOTAL PEACE OF MIND

IAJ is a premium provider of business jet support and VIP services at airports throughout Japan. Our experienced staff will be with you every step of the way, from permitting and trip planning to managing your entire ramp service operation, and we'll care for your valuable clients, crew and passengers throughout their entire stay in Japan.



## Why Choose IAJ?

- 20 years experience
- Premium service throughout Japan
- One-stop portal for aviation support and land services
- Experienced staff and dedicated equipment
- VIP and diplomatic flight expertise
- Comprehensive flight support
- Multi-lingual staff
- Contracts with major airport operators and vendors
- Hotels, ground transportation, tours, business arrangements
- Business jet and commercial aircraft handling experience

***High-quality, result-driven service!***

## ***We Bring Japanese Quality to Aviation Services***

**InterAviation Japan Co. Ltd.**

**Airport Offices:** RJTT/HND, RJAA/NRT, RJCC/CTS, RJBB/KIX

**Operations Inquiries:**

**E-mail:** [info@interavia.co.jp](mailto:info@interavia.co.jp) • **Tel:** +81-3-6435-2377 • **Fax:** +81-3-6435-2097 • **Web:** <https://interaviationjapan.com>





Illustration: Denis Carrier

# Space waders

In the aftermath of the three-day disruption caused by drones at London Gatwick Airport, what measures should business airports be taking to protect their operations and keep out these unwanted guests?

Words | **Kirstie Pickering**



he disruption to operations at London Gatwick Airport created by rogue drones in December 2018 was unprecedented. Flights were grounded at the airport intermittently over three days, with

incoming aircraft being diverted to alternative hubs. Over 1,000 flights were canceled, impacting around 140,000 passengers. The scale of this disruption – in addition to recent similar drone attacks at the international airports of Heathrow, Dubai, Newark, and previously London Biggin Hill – has made business airports hyper-aware of their vulnerabilities.

## What is the threat?

Drones actually offer a great potential for airports for the inspection, maintenance and monitoring of infrastructure and aircraft on the ground. However, they become a threat when they cannot be identified. A lack of preparation, information and control when it comes to drone attacks expose business airports' security weaknesses.

Martin Lanni, CEO at airspace security solution company Quantum Aviation, says, "Risk to life is the primary concern of airport and security authorities, but there are secondary and tertiary threats too. The direct operational and economic effects of flight disruption at an airport can be reasonably well understood and measured, but there are knock-on effects with flights attempting to arrive at the disrupted location, and also for the airports that were expecting departing flights to be with them on time.

"A drone is an asymmetric threat; a simply operated, small remote-controlled toy costing a few hundred pounds that can potentially inflict magnitudes more economic damage," he says.

Drones pose an even greater threat to life on business jets compared with their commercial counterparts. Unmanned aerial systems (UASs) can cause critical damage to light business aircraft as these jets are built from lightweight materials and are more reliant on having both engines operating during take-off and landing. This means that an impact to the fuselage or to an engine poses a serious flight safety risk.

Lanni adds, "We do not think a drone is likely to penetrate a large passenger aircraft's windshield at typical approach/departure speeds, but it's possible that this may be an issue for lighter aircraft without substantial windows. For a rotary aircraft, the main issue is a drone striking a tail rotor and inflicting what could be catastrophic damage."

"Even a small drone would cause significant airframe damage to a jet if hit at speed," says Mark Blois-Brooke, chief pilot at TAG Aviation UK and Malta. "If an engine ingested one, this would result in severe engine damage or even fire. TAG carries high-profile passengers who could be deliberately targeted by a drone or swarm of drones. This is a major concern to all operators.

"The biggest challenge is that drones are almost impossible to regulate. There is a code of conduct for operators in the UK, but that's it. Drones should be geofenced, meaning the GPS chip is programmed to avoid certain geographical areas. Unfortunately, a person with bad intentions would likely be able to bypass this easily."

## Plan of attack

The new threat of drone attacks means airports are forming contingency plans and investing in anti-drone technology to protect their sites. Such plans are being bolstered by changes in regulation from governments, such as the UK's recent change to no-fly-zone parameters around all airports. The new restriction zone includes an airport's aerodrome traffic zone (ATZ) as well as 5km (3 miles) by 1km (0.6 miles) extensions from the end of runways to protect take-off and landing paths. The restriction zones were effective from March 13, 2019.

"Airports should have a contingency plan that lays out the exact solutions and processes that should be taken in order to mitigate against potential threats to airspace safety," says Ben Marcus, co-founder and chairman at airspace management solutions company AirMap. "This

## How can airports protect themselves?

Robert Garbett, chief executive at drones consultancy company Drone Major Group, believes anti-drone methods fall into two categories.

"I would like to encourage airports to conduct risk-based strategy reviews to develop the policies and procedures required to mitigate the risk of drones but, if once this is complete, technology is deemed appropriate, there are two main classes to be considered," he says.

"Detect, identify and track [DIT] is by far the most realistically capable of the counter-drone technology on the market. This is still in a state of perpetual development and many of the systems available on the market have not yet been designed to any 'counter-drone' specific standards as these are still in development, and very few have been tried and tested in the field or independently tested.

"There is a wide variety of solutions available on the market using an array of approaches, capabilities and operational concepts, so we are expressing caution to airports entering into this field and offering independent procurement advice and independent testing services to assist as far as possible until appropriate standards are in place for the manufacturing, operation and testing of such systems. While cost is a factor, we urge airports to consider the most appropriate systems for their needs with layered and integrated capabilities, rather than simply listing systems by cost.

"The second option is systems designed to defeat or take down drones. UASs come in many forms, with many being illegal to use in the UK by anyone except the police and military. There are many systems available on the market, but we would urge airports not to engage with vendors of such systems before seeking advice from the police, or in the case of largest Critical National Infrastructure airports, the Centre for the Protection of National Infrastructure."





**“Smaller airports taking no action at all, but rather waiting to see what larger airports do, is problematic”**

Robert Garbett, chief executive at Drone Major Group

may include technology used to intercept a drone operation on behalf of the military or other national security agency. Of course, in the future when there are many drone operations taking place within controlled airspace for things like airport building maintenance or package delivery, an effective UAS Traffic Management [UTM] system will need to be in place to identify when the contingency plan is necessary.”

For business airports, the threat drones pose isn't solely aircraft being downed. Interruption to flight operations caused by UASs could create a bad reputation for an airport or operator as it would reveal its weak spots in security.

Quantum Aviation's Lanni says, “The types of clients using business airports are often ‘time poor’ and responsible for considerable value in turnover. Disruption to their schedules means they must delay decisions or possibly even miss vital business opportunities. A business airport's unique selling point is the ability to deliver the most precious commodity to the business user – time. If an airport has operations suspended due to drone issues, their reputation suffers and this is extremely difficult to recover in the short term.”

### Investment in technology

The disruption at London Gatwick led to the military being deployed at the airport. To avoid such measures being called upon, airports are now looking at what technology they can invest in to reduce or omit the threat of drones interrupting operations.



Main image: **Drones pose a great threat to business aircraft and could potentially down an aircraft**

Above: **Robert Garbett, chief executive, Drone Major Group**

AirMap's Marcus comments, “The integration of Counter-UAS [C-UAS] technology into a UTM system provides the ability to identify all aircraft movements within the controlled airspace. Information related to any aircraft detected by C-UAS is exchanged with the UTM system and remotely identified as either collaborative [registered] or non-collaborative, with the latter requiring intervention. C-UAS alone will not be sufficient in determining whether a drone operation requires intervention because not all drone operations at airports are unlawful. Detection must be coupled with UTM intelligence to adequately inform and ensure the safety and smooth operations of all airports.

“Airports should implement UTM technologies that provide a common operating picture of the airspace environment for both manned and unmanned aircraft. Furthermore, airports can work with civil aviation authorities to develop a clear concept of operations for drone enablement, as well as risk mitigation for potential drone incursions,” Marcus adds.

There is no one-size-fits-all technology on the market that will help every airport with this matter. Other security options include basic radio frequency detection systems that can create alerts, a remote-control signal or video feed being used to operate a drone, or a dedicated electronically scanned radar specifically optimized for drone detection.

“Drones are difficult to spot at the best of times and only high-end electro-optical cameras can really be much use in assisting with the classification process if a possible drone detection has taken place,” says Lanni. “What, then, after a detection? Most developed nations have very strict regulation for jamming effects and they tend to usually be the preserve of the police and military, but dialog is ongoing to enable a more permissive response in this area in the UK.

“At Quantum, we have introduced DroneHunter, an extremely capable drone interdiction system that physically removes the rogue drone from the area and contains it in a safe place. This capability also needs special permission and Quantum's team of airspace security experts work with customers to enable this from aviation and law authorities.”

In the USA, it isn't as simple as just implementing a new technology. Title 18 (crime and criminal procedure) and Title 49 (transportation) of the United States Code put limitations on what can be enforced at airports across the USA. Even drone detection systems require close FAA coordination to deploy in or around an airport environment to ensure there are no safety issues and operational response protocols are fully understood.

An FAA spokesperson told *Business Airport International*, “In accordance with the Preventing Emerging Threats Act of 2018, the FAA works closely with the Department of Homeland Security [DHS] and the Department of Justice [DOJ] to test and evaluate UAS detection and mitigation systems prior to deployment. While the Act provides Counter-UAS authority to DHS and DOJ that may allow an operational response to significant disruptions at airports, it does not allow any entity to conduct steady continuous detection or mitigation operations at US airports.

## DRONES

Right and below: **The AirMap UTM Dashboard makes it easy for airspace managers to provide drone operators with safe and secure access to the airspace**

“Some detection systems may be more rapidly deployed to airports if they have been closely coordinated with the FAA and do not violate provisions of Titles 18 or 49 of the United States Code. There are substantial legal impediments and significant operational and safety impacts associated with the use of mitigation systems at airports in continuous use. Congress would need to provide additional legal authority to permit continuous use of some detection systems and any mitigation systems at airports.”

Mark Adams, chief management analyst for government affairs at Los Angeles World Airports (LAWA), adds, “The potential impact of drones in an urban airspace is well documented in the press. LAWA shares the concerns of many that drones be safely integrated into that airspace. We will continue to work with regulatory officials, public safety agencies and industry stakeholders to bring that about.”

### What else?

Is technology the answer to this issue? Many believe that the education of staff, passengers and those living locally to airports is crucial. Drone Major Group advises airports to engage with the local community on this issue as much as possible to encourage greater reporting of air drone use within the restricted area. The company has developed a package for schools that will, in due course, be delivered on a trial basis to schools in one region of the UK before being delivered on a wider basis. It believes that awareness, education and understanding are some of the most powerful tools at an airport’s disposal at this time.

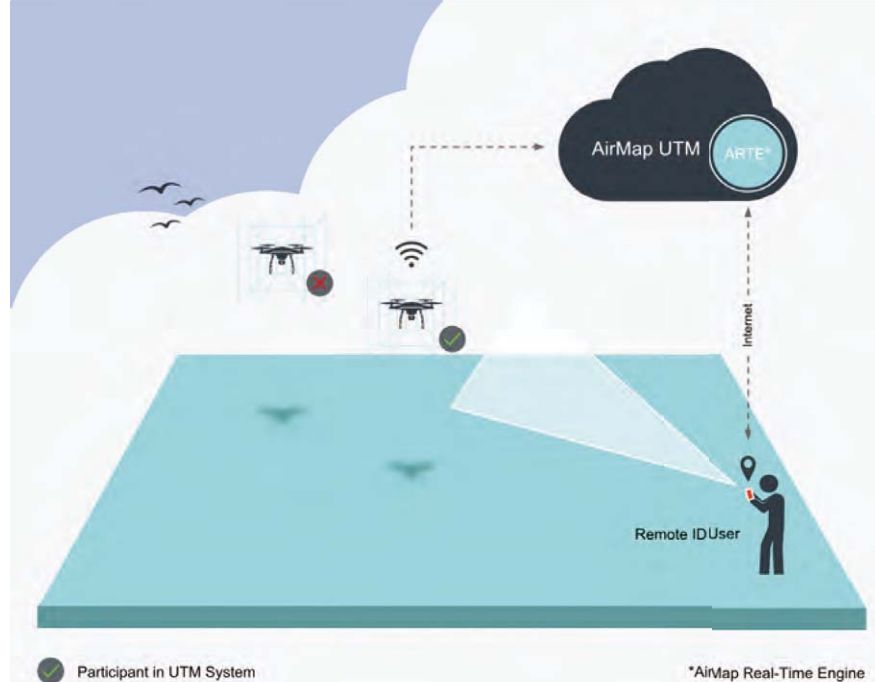
Garbett says, “We are seeing the full range of responses from airports, with some large airports running almost blindly into the purchase of counter-drone equipment before taking the time to fully analyze the risk. This could lead to disruption and reputational damage for no reason. Smaller airports taking no action at all, but rather waiting to see what the larger airports do, is problematic when it is likely that a strike at a smaller airport would have far more serious safety consequences, albeit to fewer people.”

AirMap’s Marcus believes simply regulatory change could make a big difference: “A lot can be done today to reduce the risks of drone incursions to a much more manageable level that only requires implementation of basic regulation for drone registration,” he says. “A drone registry serves as the foundation for remote identification and tracking of drone operations by authorities. These regulations are now being rolled out in many countries, but their implementation needs to be accelerated.”

### Looking forward

Commercial drone usage is expected to add £42bn (US\$55m) to the UK economy alone within the next few years, and will be rolled out across airports with increasing frequency over the next 10 years.

Marcus concludes, “2019 will be the year that airspace management systems for unmanned aircraft will flourish even more, and we can expect UTM to be widespread by 2020 in light of the events at Gatwick.” ○



## European protection

AirMap deployed its UTM Platform across Europe in 2018 in countries including Switzerland and the Czech Republic. The UTM Dashboard aims to make it easy for airspace managers to provide drone operators with safe and secure access to the airspace.

This is achieved by identification and knowing who is flying in managed airspace, with pilot contact details and identity verification capabilities; geofencing by creating digital boundaries with rules-based access requirements and instantly publishing geofences to thousands of drone operators; and communicating directly with drone operators via individual SMS text or broadcast notifications to AirMap-powered applications.

“At Václav Havel Airport in Prague, the Air Navigation Service of Czech Republic partnered with us to ensure safe

drone operations on their premises,” says AirMap’s Marcus. “Czech airspace managers now have a comprehensive view of their managed airspace and can configure, monitor and automate their management with the easy-to-use cloud-based dashboard. To begin regulating flights and de-conflicting the airspace efficiently, managers are also able to provide drone operators with manual authorizations.

“AirMap has also partnered with Skyguide, the Swiss air navigation service provider, to develop and deploy a national drone traffic management system for Switzerland. Swiss U-space use AirMap for drones that share the airspace with aircraft, protecting that airspace with dynamic geofencing, instant digital airspace authorization, solutions for situational awareness, and more,” he concludes.







**Lyon Saint-Exupéry Airport (LFLL/LYS) based, SPACE Executive Handling specialty includes : corporate, VIP, government and ambulance flights.**  
**We fulfill any requirement quickly and reliably.**  
**Our team is dedicated to make your life easier, but we can achieve much more for you!**

#### **GROUND HANDLING SERVICES :**

- Passenger and Crew Assistance
- Passport and Customs Assistance
- Airside ground transportation in VIP cars
- Passengers and baggage transfer to main terminals, St Exupéry railway station and helipad
- Booking of limousines, taxis, hotels (with crew rate), car rental, aircraft, helicopters
- Conference rooms for on-site meetings
- Transfer to the Alps ski resorts (limousines, luxury 4WD, helicopter)
- Comfortable, fully equipped lounges
- Catering services
- Interior and exterior aircraft cleaning services
- Liaison with Fuel Supplier (A1 Jet fuel)
- Weather and NOTAMS briefing
- Maintenance's Organization
- Cargo handling / Warehouse

#### **YOUR PERSONAL CONTACT :**

Tel. 24/7: +33 661 616 904

Email: [space@spaceaero.net](mailto:space@spaceaero.net)

**FURTHER INFORMATION UNDER [WWW.SPACEAERO.NET](http://WWW.SPACEAERO.NET)**



*Executive Handling in Lyon*



Despite political uncertainty in the UK, London remains a hub for business aviation in Europe. *Business Airport International* looks at how traffic is growing in the city, as well as the opportunities for operators and airports

Words | Hazel King







# London calling

London is one of the  
busiest European cities  
for business aviation

# A REFLECTION OF EXCELLENCE



Visit the  
Farnborough  
Airport Experience  
on Stand **M73**  
at EBACE

TAG Farnborough Airport  
Design and people working beautifully together  
The purpose-built airport for BUSINESS, for PRIVACY, for LONDON  
[tagfarnborough.com](http://tagfarnborough.com)







Above: Luton is one of the busiest London airports for private jets

Below: TAG Farnborough is the number-one business airport in the UK in terms of business aviation movements

***“One of the major challenges for business aviation in London is the reduction of 24-hour access”***

Adam Twidell, CEO of PrivateFly

**W**

ith the UK’s unstable political landscape, as well as conflict over the best solution to London’s aviation capacity crisis, one

could be forgiven for thinking that the outlook for business aviation in the UK’s capital was a bleak one. But that couldn’t be further from the truth, according to private jet booking service PrivateFly. Its latest report states, “When you combine London’s multiple airport gateways for private jets, it’s the top city in Europe by some distance. While Paris Le Bourget may be the single busiest airport in Europe, the capital’s top three airports – Luton, Farnborough and Biggin Hill – generated more than 73,000 flight movements between them in 2018, versus 54,000 movements in Paris.”

Adam Twidell, CEO of PrivateFly, comments, “Both Farnborough and Biggin Hill experienced significant growth in 2018. In addition to making themselves more attractive to the industry and private jet passengers, they each benefited from declines at London Luton and RAF Northolt respectively – and are likely to continue to do so in 2019.”

According to EBAA’s report, *European business aviation: Economic value and business benefits*, 50% of the UK’s business aviation activity is concentrated in greater London, and the region accounts for 4,278 direct and 6,468 indirect jobs. The report shows that London holds 6.5% of the European share of business aviation’s direct, indirect and induced employment, making it “Europe’s most important business aviation location”.

#### Upward trends

Despite stagnant growth in Western Europe and falling demand in the UK as a whole – charter activity out of the UK fell by 10% in January 2019, according to industry data from Wingx Advance – airports serving London are seeing consistently strong growth.

“There was a 4.4% increase in movements between January 2018 and January 2019, and that trend appears to be continuing into February as well,” says Brandon O’Reilly, CEO at TAG Farnborough Airport. “We’ve had







# London City Airport Private Jet Centre

Get closer.

## The Only London Airport Actually in London

London City Airport - 4 miles from Canary Wharf, 7 miles from The City and 9 miles from Mayfair.



- Only a 30 minute ground transfer to Mayfair & Kensington
- New competitive pricing for operators with parking included
- Global 6000, Dassault 8X, Embraer 550 and Gulfstream 280 all recently added to the existing aircraft approvals
- Broker Incentive Program for every flight booked

 [jetcentre.londoncityairport.com](http://jetcentre.londoncityairport.com)

 [jetcentre@londoncityairport.com](mailto:jetcentre@londoncityairport.com)





Above: **Harrods Aviation offers first-class crew and passenger facilities at Stansted and Luton**

Below: **XJet operates a luxury FBO at London Stansted Airport**

positive increases for the past few years, but there was a very large increase between 2017 and 2018 – a 13.8% rise in movements.” Farnborough has been so successful in fact that it is now ranked as the number-one business aviation airport in the UK in terms of business aviation movements, according to CAA statistics.

“We’ve been a dedicated business aviation airport for over 15 years, and it is known that the type of services we offer here are only for business aviation customers – there are no complications, which makes us attractive,” O’Reilly says, explaining the airport’s success. “Secondly, we don’t have restrictions as far as slots are concerned, and business aviation customers like that – the whole idea of business aviation is to arrive and depart when you want to, not when the airline or airport wants you to.”

Other airports enjoying growth are Biggin Hill Airport, which saw a rise of 12% in aircraft movements between 2017 and 2018, and Southend, a relative newcomer to the business aviation market, which welcomed 2,000 private jets in 2018, an increase of 100%. “Our target for private jets is to handle 3,500 movements in 2019, and we believe we can achieve that because of the [temporary] closure of Northolt and the limitation of night-time movements at Luton and Stansted,” says Glyn Jones, London Southend Airport CEO.

### Closures and limitations

RAF Northolt, which has a reputation for handling VVIP, royal and dignitary flights, will be closed for much of 2019 as it completes a £23m (US\$30m) project to upgrade the existing runway, improve drainage and install new arrestor beds to improve safety.

Meanwhile, at Luton restrictions were put in place in 2018 to limit the number of night-time operations, with no private jets able to operate between 10:00pm and 6:00am from June 1 to September 30. This has resulted in a reduction in slot capacity for business and general aviation flights as the airport focuses on its growing airline activity, and the airport saw a 4.2% reduction in private flights in 2018, according to PrivateFly. Twidell says, “Luton used to be the de facto London choice for many of our customers, but its popularity has eroded as airline activity takes greater priority there. The same night-flight restrictions are set to be in place this summer, so we’re expecting this trend to continue.”

Jonathan Pollard, London Luton Airport’s chief commercial officer, says, “Despite a 24-hour operation, London Luton Airport [LLA] has some of the most stringent

***“We’ve been a dedicated business airport for over 15 years and it is known that the type of services we offer are only for business aviation customers”***

Brandon O’Reilly, CEO, TAG Farnborough Airport

planning conditions of any major UK airport. Restrictions on night-time flights were needed to comply with strict noise controls. The restrictions included refusing ad-hoc flights during the night period in the four busiest months of the summer [June to September], preventing operators from rescheduling flights from the daytime into the night period and refusing any non-emergency diversions. This led to a slight decrease in the number of movements compared with the same period in 2017.”

Harrods Aviation, which operates FBOs at both Luton and Stansted airports, believes the key to operating at these busy London airports is to book as early as you can. “This is key in securing handling and parking space,” says Will Holroyd, director of sales and marketing at the company. “Ramp capacity is often limited at Luton – the airport is, at times, a victim of its own success and popularity. However, proven to offer the shortest drive-time to London from a 24/7 airfield, Luton is usually an operator’s first choice location.”

At Stansted, growth has been slow over the past few years, partly due to a lack of customer awareness, according to Paul Forster, general manager of XJet, which operates at the airport. “Stansted does not promote the airport to the business aviation sector, therefore many potential clients flying into London do not consider it as an option.”

However, Forster believes Stansted is a viable option for clients looking to access London, with XJet offering “a very private ramp, car parking for up to 150 cars and a superb FBO”. He continues, “From the aircraft doors opening, to the passengers being on the M11 into London, it only takes a few minutes. We can offer a helicopter transfer into London or alternative private sites if required. Inside the XJet London facility we have maintenance, in-flight catering and an aircraft detailing company alongside our amazing lounge, so we really do offer a ‘one stop’ capability.”

### Speed and service

For those who are really time-poor, London City Airport could be the best option for customers looking to gain quick access into the city. Situated





# What is better than Harrods Aviation?

## MORE Harrods Aviation...

With the introduction of increased hangar space at London Luton, we are proud to offer...

MORE VIP passenger handling

MORE ramp space

MORE maintenance capability

MORE hangarage

To find out MORE  
call +44 (0)1279 665300  
email [sales@harrodsaviation.com](mailto:sales@harrodsaviation.com)

**Harrods** AVIATION

LONDON LUTON • LONDON STANSTED

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







just 10 miles (16km) from Mayfair and 4 miles (6km) from the financial district of Canary Wharf, the airport prides itself on its “90-second experience”. Chris Clayton, London City Airport’s Jet Centre manager, adds, “Passengers can expect to be transferred from car to aircraft, or reverse, in 90 seconds. The Jet Centre has its own security, immigration, dedicated ground team, equipment and fuel bowser, so nothing is left to chance.”

As dedicated business and general aviation airports, Farnborough and Biggin Hill also boast speedy service, with the latter offering a helicopter shuttle service, run by Castle Air, that takes just six minutes to get to the London Heliport on the south bank of the River Thames. “This service is in incredibly high demand and consequently, in December 2018, Castle Air added a new AgustaWestland AW139 to its fleet of six Agusta 109s,” comments Andy Patsalides, marketing manager, London Biggin Hill Airport.

In Farnborough, the airport has opened a new entrance called Meadow Gate that provides fast-track access for crew and passengers. “The journey for our customers starts with them coming into the airport and we want to make sure they get quick, speedy access into the terminal and onto their aircraft,” O’Reilly explains.

“We have a new lounge on the first floor of the terminal that is used to accommodate customers flying on larger aircraft, particularly the airliner-size business jets. This is really for groups of customers such as sports teams

***“As jets become quieter,  
it seems unfair for them to  
continue to be categorized  
in the same way as  
commercial traffic”***

Will Holroyd, director of sales and marketing  
at Harrods Aviation

Above: Harrods Aviation  
operates FBOs at Luton  
and Stansted

or music groups, and those customers have special requirements – there can be 40 or 50 people on some occasions and so the new lounge accommodates those requirements and has proved very popular.”

The airport also offers a smaller lounge for individual customers, as well as a high-tech gym for crew. In 2020, Gulfstream will open a new MRO facility at TAG Farnborough Airport. O’Reilly says, “The site for the new MRO facility is all prepared now – an old hangar has been demolished and the land resurfaced and prepared.

Construction starts in April and should be ready by July 2020. We’re looking forward to welcoming new Gulfstream customers.”

### Industry challenges

“One of the major challenges for business aviation in London is the reduction of 24-hour access – a result of congestion and capacity issues,” says PrivateFly’s Twidell. “Historically, London has had the edge on other European cities by being open all hours. As the busiest city for business aviation in Europe, and a center of global business, being open 24/7 supports that.

There is definitely a demand for night-time take-offs and landings, to maximize time away – the private jet traveler wants to fly when it suits them, on a bespoke itinerary, and often at short notice.”

For Harrods Aviation’s Holroyd, one way of addressing capacity issues is for the government to change the way it treats business and general aviation traffic. “As the jets operating in our sector become quieter, it seems unfair for them to continue to be categorized in the same way as regular commercial traffic,” he says. “In addition to this, there is little if any governmental recognition and support provided to our industry, despite the revenue we and our clients generate, directly and – most importantly – indirectly to the UK economy.

“We continue to make the argument for commercial business aviation to have a separate set of rules and regulations from commercial scheduled airlines, given

## Foreign Carrier Permit

### UK operators will need to be aware of changes to permit requirements in the EU

When the UK leaves the European Union on March 29, EU27 and European Free Trade Association (EFTA) operators will no longer benefit from an exemption that allows them to undertake UK commercial operations without prior approval provided that the points served are all within the boundaries of the European Common Aviation Area (ECAA).

According to EBAA, any commercial charter or scheduled flight (cargo or passenger) undertaken by EU27 and EFTA carrier flights to, from, within, or via the UK will require a Foreign Carrier Permit before the flight can be undertaken. Such permits are granted by the Civil Aviation Authority (CAA) in accordance with the policy set by the Department for Transport (DfT).

The CAA issues two types of Foreign Carrier Permit: A seasonal permit that covers scheduled operations (usually based on the bi-annual IATA winter and summer seasons) or series charter operations. These permits

are valid only for the season or period which they were granted for; and an ad-hoc charter permits covering either one, or a short series of flights, which are granted as required.

Private or state flights, or those undertaken for non-revenue purposes, such as positioning, will still be allowed to be undertaken without a permit needing to be held.

Discussions are still ongoing as to the future UK-ECAA arrangements, which may include a transition period to December 2020, but operators are strongly advised to apply for a permit as soon as possible to ensure operational continuity.

For more information visit <https://www.ebaa.org/news/important-actions-to-ensure-continuity-of-your-flights-to-the-uk/>

## CITY FOCUS: LONDON



that our requirement for access and slots is always on-demand, and especially in view of how technically quieter our aircraft are than commercial carriers.”

But while congestion and capacity issues remain a major challenge for the industry, another headache is the uncertainty around Brexit. At the time of going to press, it was still unclear on whether the UK would leave with a deal or not, and what that would mean for the economy as a whole.

Twidell of PrivateFly, comments, “The prospect of the UK entering into bilateral agreements with the EU is not just a headache, but a potential migraine for the private aviation industry. Business aviation works closely together as one European network. Operators need to be able to optimize their flight plans within Europe to make sense commercially. Private aviation is about flexibility and this could put barriers in the European sky, just when private aviation is taking off again.”

However, it appears that most in the business aviation industry are not too concerned about the impact of Brexit, despite the uncertainty. “At Luxaviation UK, and throughout the wider group, we do not anticipate Brexit will cause too much of an issue for us because we have multiple AOCs across Europe,” comments Patrick Margetson-Rushmore, chief executive of Luxaviation UK. “This means that, if necessary, clients will be able to use our German AOC to fly from, say, Frankfurt to London. Issues may arise when an aircraft registered to a UK AOC needs to fly within an EU-registered AOC – Paris to Brussels is just one example.”

At Farnborough, the airport has changed from having an EASA-licensed airfield to a UK CAA license, although O'Reilly says this was a happy accident and not directly linked to Brexit. He adds, “London, in my opinion, is always going to be a busy, popular city for people to travel to and from, and I don't think that is going to change with Brexit. If there is anything to be garnered by the recent performance at Farnborough – the increase in the number of movements – at a time when Brexit has been on everyone's lips, then maybe there isn't much to fear.” ○

## Key airports in London

### Heathrow

**Operating hours:** 24 hours, night-time restrictions apply 11:00pm-6:00am  
**FBO:** Signature Flight Support  
**Runway length:** 09L/27R – 12,802ft (3,902m); 09R/27L – 12,008ft (3,660m)

### Gatwick

**Operating hours:** 24 hours, night-time restrictions apply 11:00pm-6:00am  
**FBO:** Signature Flight Support  
**Runway length:** 10,879ft (3,316m)

### Stansted

**Operating hours:** 24 hours, night-time restrictions apply 11:30pm-6:00am  
**FBOs:** Harrods Aviation, Fayair, Universal Aviation, Xjet London, Inflight Jet Centre  
**Runway length:** 10,000ft (3,048m)

### Luton

**Operating hours:** 24 hours except between June 1 and September 30 – restricted to 6:00am-10:00pm  
**FBOs:** Harrods Aviation, Signature Flight Support  
**Runway length:** 7,087ft (2,162m)

### London City

**Operating hours:** Mon-Fri 6:30am-9:30pm; Sat 6:30am-12:30pm; Sun 12:30pm-9:30pm  
**FBO:** Jet Centre  
**Runway length:** 4,948ft (1,508m)

### Farnborough

**Operating hours:** Mon-Fri 7:00am-10:00pm; weekends and bank holidays 8:00am-8:00pm  
**FBO:** Airport-owned  
**Runway length:** 06 – 6,758ft (2,060m); 24 – 6,965ft (2,123m)

### Oxford

**Operating hours:** 6:00am-10:30pm  
**FBO:** Oxfordjet Terminal  
**Runway length:** 5,092ft (1,552m)

### Biggin Hill

**Operating hours:** Mon-Fri 6:30am-11:00pm; weekends and bank holidays 8:00am-10:00pm  
**FBO:** Biggin Hill Executive Handling  
**Runway length:** 5,912ft (1,802m)

### Southend

**Operating hours:** 24 hours  
**FBO:** Stobart Jet Centre  
**Runway length:** 6,089ft (1,856m)





## XJet's European Hub: One of the largest 'VIP' facilities in the world situated at London Stansted Airport

### SERVICES

- Full Ground Handling Services
- 24/7 Flight Support Concierge Services
- Fueling Services
- Aircraft De-Icing
- Maintenance & Repair Facilities
- Gourmet In-Flight Catering
- Valet & Chauffeur Service

### AMENITIES

- VIP Majlis Lounges with private en-suite bathrooms
- Private Security Screening Area
- 90,000 Square feet of Climate Controlled Hangar
- Playstation and VR headset / Games Rooms
- Luxury Crew room with Sleeper Pods
- Espresso & Cocktail Bar
- 27 Parking XJet spaces available and more if required

### XJET LONDON


Phone Line: +44 1279 66157  
24/7 Line: +44 (0)7525 843020  
Email: london@xjet.com











As CORSIA enters its reporting stage, *Business Airport International* finds out how one of the largest carbon pricing instruments in the world will affect the business aviation sector

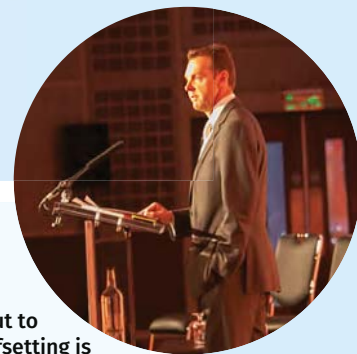
Words | Paul Willis

S

tarting in January this year, aircraft operators flying internationally were obliged to begin monitoring, reporting and verifying (MRV)

their carbon emissions data as part of a new United Nations program. Known as the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), the scheme was set up by the International Civil Aviation Organization (ICAO) and will apply to 85% of international civil aviation, including a portion of business aviation.

The introduction of CORSIA comes a year after Switzerland launched its own emissions trading system (ETS). Both CORSIA and the Swiss ETS are closely modeled on the EU ETS, which has been in existence since 2005, according to Adam Hartley, who manages the global regulatory services team at Universal Weather and Aviation. "They're built on the exact same directive and methodology as the EU ETS," comments Hartley.



Above: **Tim Johnson**, director at the Aviation Environment Federation

## Is carbon offsetting ultimately a dead end?

With the introduction of CORSIA, carbon offsetting is set to become the new normal in aviation. But according to Tim Johnson of the AEF, its current heyday could be something of a red herring, with a lot of the world already moving on from it.

CORSIA is the solution to the goal ICAO set for itself in 2010 of achieving carbon-neutral growth from 2020 onward. Since then, however, the Paris climate agreement signed in 2016 and the latest Intergovernmental Panel on Climate Change (IPCC) report that came out late last year have changed the thinking on carbon cutting, according to Johnson.

"The carbon debate has really been reframed around complete decarbonization by the end of this century and net carbon zero by the middle of this century. There have been various commitments by European countries – notably France and Sweden – and people are beginning to move to this as the new policy objective," he explains.

According to Johnson, the question then becomes how does the aviation offsetting model fit into a world where the overall

aim is for net carbon zero (in other words, where negative emissions technologies cuts carbon output to nothing). "We can't just assume that continuous offsetting is going to be sustainable," he says.

Johnson believes aviation needs to take seriously the question of how to achieve in-sector reductions without the need for offsetting. While sustainable aviation fuels offer some hope, Johnson believes that what is ultimately needed is radical technology changes such as electrification.

Although there are various prototype electric airplanes that may soon come to market, most are two-seater, according to Johnson. "In terms of scaling that up to commercial aircraft, they just don't seem to have any sign of where that battery density is likely to come from at this stage. I'm sure the shrinking of the technology will come – the same way it did for cell phones – but it's not around the corner. The question is how do you keep the focus on these long-term technologies despite there not being any immediate market application."

According to Hartley, the EU ETS was created out of an ICAO directive for a global emissions scheme that failed to materialize at the time because of a lack of international support. "The European Commission took that directive and made it its own because it had the support regionally," he comments.

The EU ETS has proved unpopular with the business aviation world, however, both because of its complexity and its perceived unfairness, according to Kurt Edwards, director general of the International Business Aviation Council (IBAC). "If you were not a commercial operator in Europe, the threshold for participation was much lower," says Edwards. "They discriminated against the non-commercial operators."

For CORSIA, those distinctions are gone. Instead, operators are exempt from the scheme if their maximum take-off weight is below 5,700kg (12,560 lb), or if their annual CO<sub>2</sub> emissions fall below 10,000 metric tons. This means that "there's a recognition of the resources of small versus big operators", says Edwards.

The other key advantage of CORSIA, according to Edwards, is that "it's a single scheme for international aviation, meaning an operator is responsible to only one overseeing authority". He adds, "One of things that drove us toward a single, market-based measure was experience with ETS, as well as a number of national schemes that were developing in Europe, and threats of them developing in China and Australia. Therefore, the industry as a whole saw the need for a single program."

***"A business jet operator making multiple transatlantic flights per week will fall into the scheme"***

Ian Britchford, director of fuel and flight analytics at Jeppesen



## Changing thresholds

The emissions and weight thresholds, coupled with the fact that the scheme only applies to international flights, means that some business aviation operators will be exempt, according to Ian Britchford, director of fuel and flight analytics at the aviation software company Jeppesen.

That said, adds Britchford, "the threshold is not particularly low and a business jet operator making multiple transatlantic flights per week will fall into the scheme."

Even for those operators who are likely to fall below the thresholds, Hartley strongly advises them to put in place a plan to track their carbon emissions going forward. "The biggest key advice is that people need to take the regulations seriously and not focus on potential exemptions," he comments.

This is because the standards and regulations governing CORSIA are subject to change. While the thresholds have been established in ICAO assembly, the same resolution that created CORSIA also calls for the ICAO assembly to meet every three years to review and monitor the way the system is functioning and to make recommendations for changes if needed.

Hartley says, "Right now we're in benchmark mode. ETS was designed in the same way. The benchmark years gave ETS and the competent authorities a couple of free years to get their processes in order and to assess the industry.

"I don't want people to look at the 10,000 metric ton threshold, which is the equivalent of about million gallons of fuel, as something set in stone. What we've seen with ETS is that thresholds can change. It's much easier to get in on



Below: **Operators will be required to begin offsetting from 2021**



***"ICAO is working on the criteria for projects that are eligible for CORSIA participants when they need to purchase emissions credits"***

Kurt Edwards, director general at IBAC

## EU ETS versus CORSIA

One of the biggest unresolved questions around CORSIA is how it will work alongside EU ETS. Launched in 2005, EU ETS remains the biggest emissions trading scheme in the world and the cornerstone of the EU's environmental policy. It was set up mainly to oversee energy plants and factories, but it was later extended to aviation.

At first, the EU ETS covered all international flights to and from the EU, but after an outcry from other countries, and after the EU was persuaded that the states within ICAO were intent on trying to find a solution for international aviation emissions, the scheme was amended to only include flights within the bloc.

For these international flights within the EU there is no clarity yet on whether they will fall under the jurisdiction of CORSIA, the EU ETS, or both, according to Kurt Edwards of IBAC.

"ICAO's definition of international aviation is a flight from one country to another country," he says. "But that definition doesn't apply to states within the EU, as far as the EU is concerned. So at this moment, the EU institutions are staying quiet on whether ETS is going to be supplanted by CORSIA for those non-domestic flights. I think they want to see how CORSIA works and how it benefits."

Until the EU pronounces its intentions, European operators will probably be obliged to do two sets of reporting, Edwards believes: "As I understand it, the reporting toward CORSIA will overlap with the reporting they're already doing for ETS."

IBAC's position on the issue is clear, he says: "From an industry point of view, we don't believe the ETS should be applying to flights between countries within the EU."



the ground floor with everyone else than to take the position that I don't think I'm going to reach those thresholds so I won't do anything about this. I think that's a risky position."

## The monitoring process

Although the collection and reporting of carbon emissions data started in January 2019 for CORSIA, operators won't be expected to begin offsetting until 2021. In the meantime, they will have plenty of work adhering to the scheme's dedicated MRV regime.

The first step in this process is the creation of an emissions monitoring plan, which is expected to outline in detail how the operator plans to comply with the MRV regime. The deadline for submission of the monitoring plan was the end of February, although it is not a hard deadline and there are no penalties if the operator misses it. To help operators, ICAO issued a generic template showing what the monitoring plan will look like and what it entails.

According to Hartley, the golden rule to keep in mind is keeping procedures as closely aligned as possible with what you are already doing. "Flight departments already know where their aircraft fly, they keep track of logs, they keep track of passenger numbers," he says. "So it's just a question of repurposing that data to also track emissions data. You don't want to then create a whole new administrative burden."

The monitoring plans are expected to be submitted to the administering authority in whichever state the operator is domiciled. In most cases, this will either be the state's aviation administration or its environment ministry, according to Edwards.

***“The benchmark years gave ETS and the competent authorities years to get their processes in order”***

Adam Hartley, manager of global regulatory services at Universal Weather



“There’s broad guidance on ICAO’s website on how to create an emissions monitoring plan, but it’s going to be a national responsibility to tell operators how they want it done,” says Edwards. “That’s why we would advise operators to get in touch with their administering authority at the earliest opportunity. If they don’t, they really won’t know what’s expected of them.”

Hartley thinks engaging with the administering authorities is particularly important in the case of non-EU states, where this will be their first experience of dealing with a carbon-offset scheme. He explains, “With CORSIA, you’re bringing in all these non-scheduled commercial operators that were exempt from EU ETS and you also have all these national authorities who are unfamiliar with emissions programs and who are going through this process for the first time. So you really need to spend time with your member state from early on to see how they are going to manage this program.”

To facilitate the monitoring process, ICAO has created an emissions calculator known as CERT, which is available to download from its website and which can be integrated into existing flight scheduling programs. ICAO has also created a reporting template that can be populated with data from the CERT tool. Once the report has been created, it will need to be audited and approved by a third-party verifier. “You provide them with a reporting package containing

Below: ICAO is creating projects where CORSIA participants can buy emissions credit

your report and any supplemental documents such as flight logs, a copy of your monitoring plan, and a copy of any internal audits,” Hartley explains.

“They would sign off on it as an auditor and send it back to you with a verification opinion statement stating your CO<sub>2</sub> output. It’s that statement that you send to your administering authority.”

### Carbon offsetting

When offsetting begins in 2021, operators whose emissions output exceeds the thresholds will have to begin buying credits on the carbon markets. Between 2021 and 2026, offsetting requirements will only apply to flights to and from the 78 states that have volunteered to participate in this first stage. From 2027 onward, offsetting will apply to all international flights.

“There will be two or three official marketplaces in which an operator can go to buy credits,” says Edwards. “Right now, ICAO is working on the criteria for projects that are eligible for CORSIA participants when they need to purchase emissions credits.

“Once that’s been established, operators will be able to go on to these online marketplaces, where they can find a project that will be most meaningful for them. There will be projects – we hope – within the industry and projects outside the industry.”

ICAO has agreed to establish an advisory group to determine the eligibility of carbon-cutting projects to participate in the markets. According to Tim Johnson, director of the Aviation Environment Federation (AEF), a UK-based non-governmental organization (NGO) that campaigns on the environmental impact of aviation, this stage of the process is crucial to the overall credibility of CORSIA.

“I don’t think we can stress enough how important an issue this is,” says Johnson. “Strong monitoring and reporting requirements are important, yes – aircraft operators need to be transparent and accountable. But the carbon markets are incredibly variable in terms of the rigor with which some programs operate. It’s important that only those units that have the highest level of environmental integrity get through. That’s the decision where there’s all still to play for and certainly from an NGO standpoint that determines the reaction, we would have to CORSIA.”

As part of his AEF role, Johnson also heads a coalition of NGOs that are collectively represented at ICAO under a single umbrella organization known as the International Coalition for Sustainable Aviation (ICSA). The coalition includes organizations such as the World Wildlife Fund and the Environmental Defense Fund in the USA.

“Within ICSA, we all have a slightly different take on how the offset markets should work, but we probably all agree on what we don’t want to see,” says Johnson. “The carbon offsetting markets began life shortly after the Kyoto protocol, so some of these things have been in existence for 20 years.

“Perhaps in its infancy it takes a while for any market to develop the necessary level of oversight and governance that would give people real confidence in it. But people tend to look at the year in which the project was issued as a critical factor in its credibility.” ○







One card. No fees.  
*For fuel and everything else.*

- No transaction or annual fees for fuel or non-fuel items
- Online account management and pricing
- 3,000 global fueling locations
- Accepted for contract and retail fuel transactions
- Purchase ancillary services with or without fuel

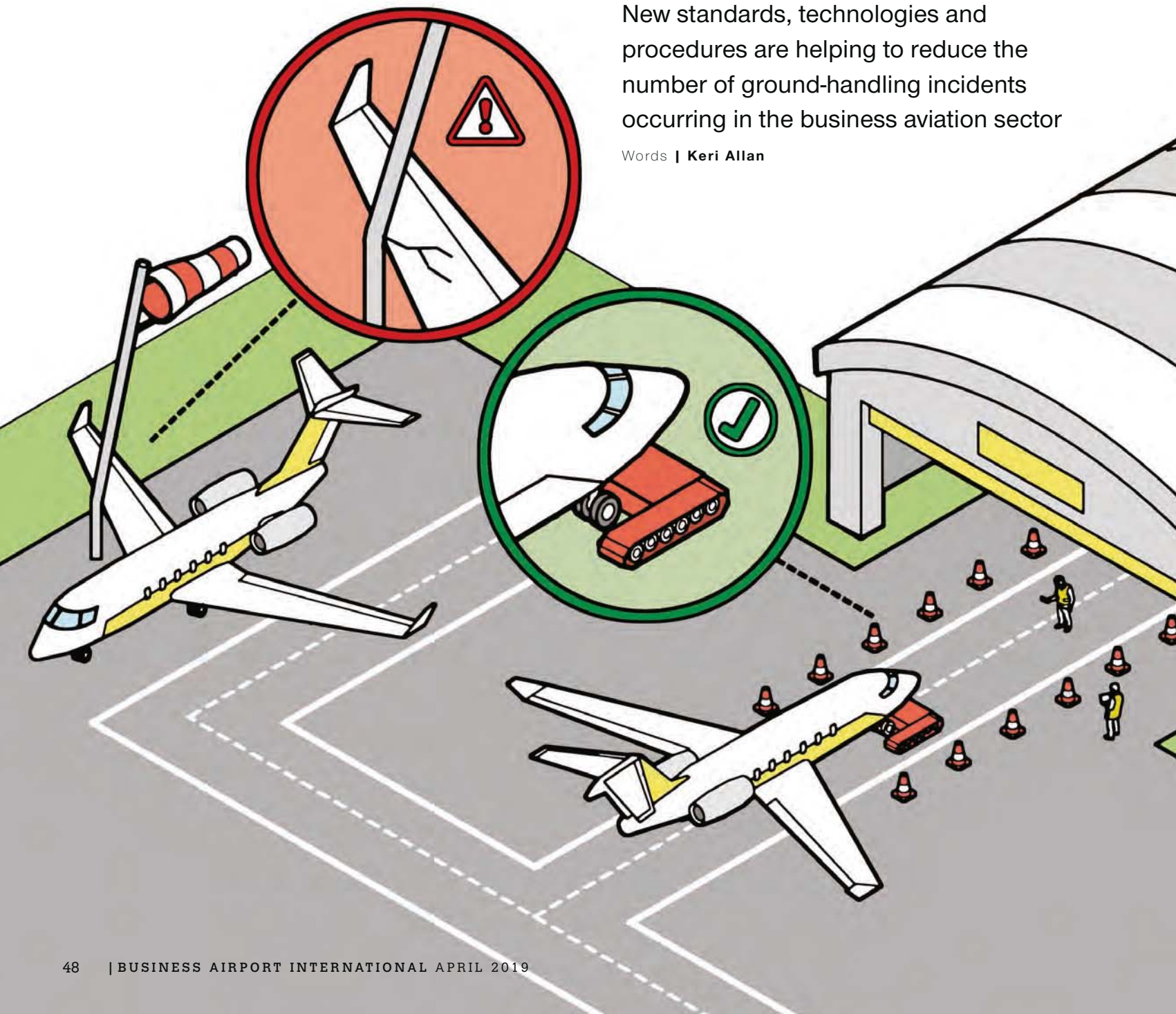
The Avfuel Pro Card: Go to [avfuel.com](http://avfuel.com) for locations, fuel pricing, and more



# *Handle with*

New standards, technologies and procedures are helping to reduce the number of ground-handling incidents occurring in the business aviation sector

Words | Keri Allan





# *care*

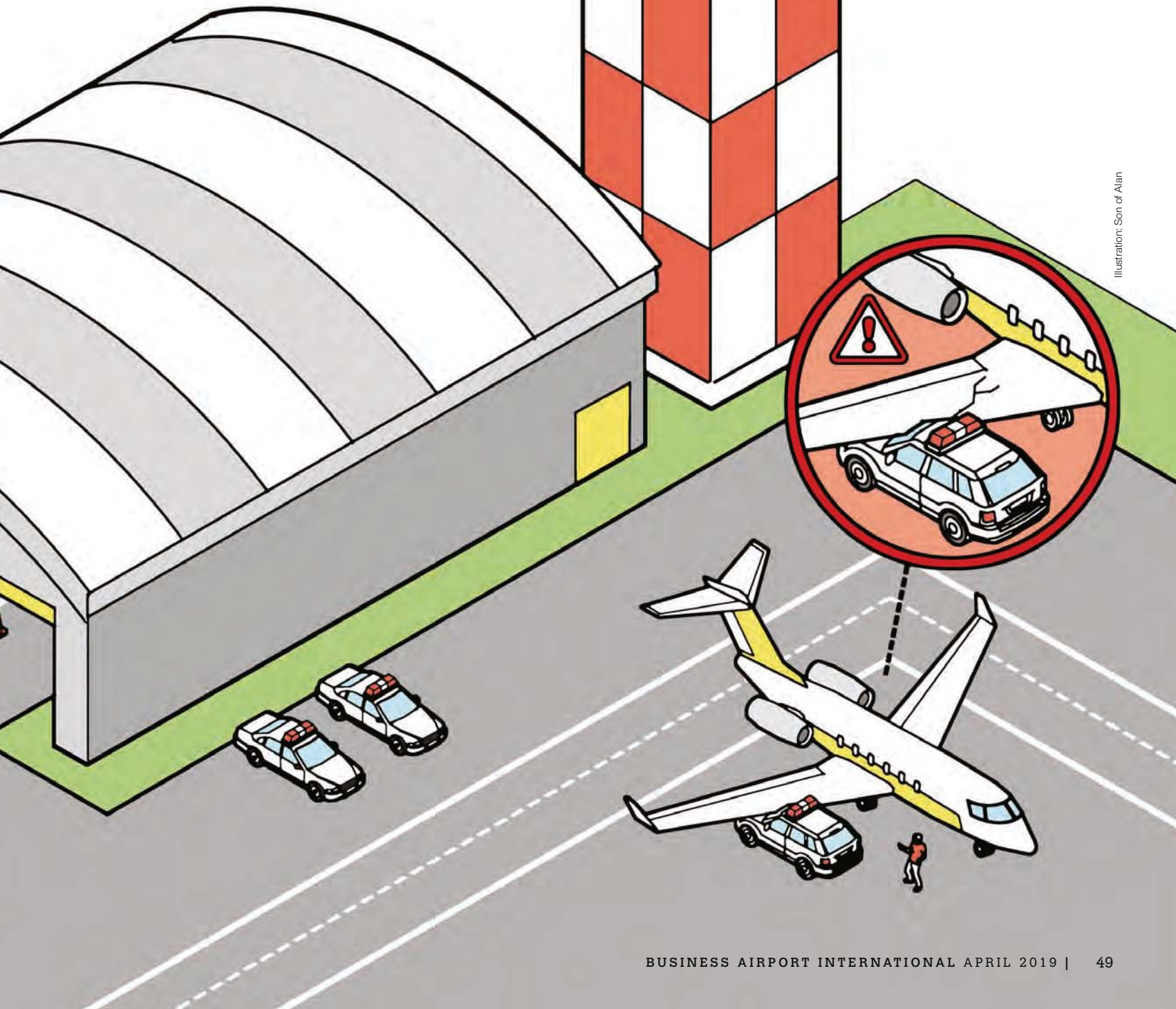


Illustration: Son of Alan





**1 877 50 MANNY +52 722 273 0981 [ops@mannyaviation.com](mailto:ops@mannyaviation.com)**





**G**round-handling incidents happen more often than any fixed-base operator (FBO) would like. The International Business Aviation Council (IBAC) claims that the majority of ground-handling incidents result in damage to the aircraft. However, there are no official figures available on business aviation ground-handling incidents and the impact they had on operations. With this in mind, there are possibly hundreds, if not thousands, of unreported ground-handling incidents in the business aviation sector and – just as important – near misses.

One of the most recent studies to be carried out in this area was from business aviation management consulting firm VanAllen Group back in 2016, which, based on historical data, revealed that business aircraft operators are 800 times more likely to incur damage to their aircraft during ground handling than in a flight accident.

Such ground-handling events have multiple consequences for companies, including out-of-service aircraft, unplanned expenses and brand damage. Therefore, it's no big surprise that the National Business Aviation Association's (NBAA) Safety Committee made ground-handling collisions one of its key safety focuses for 2018.

According to VanAllen Group's study, 50% of ground-handling events are made up of 'hangar rash' – minor incidents involving damage to aircraft that typically originate due to improper ground handling in and around a hangar. This is followed by towing at 33%, collisions at 10% and events during taxiing at 7%.

Essentially aircraft are at the greatest risk when on the ground. This is because there are so many opportunities for incidents to happen, as Kevin Donnelly, director of FBO safety and security at Jet Aviation, explains: "For



***"All too often in organizations, CEOs, managers and owners leave safety to people further down the chain"***

Joe McDermott, senior business aviation consultant, Global FBO Consult

Above: NATA's Safety 1st program offers a deicing module

Below: A Beech Super King Air 200 being safely handled by a Lektro tug



each leg of a flight there is most likely an average of two tow movements involved – sometimes more – and there are multiple vehicle interactions such as fuel trucks, golf carts, catering vehicles, portable water carts, lavatory carts, de-icing trucks and airport vehicles, and even personal vehicles in some locations. There are also the interactions with other aircraft in close proximity – and the vehicles servicing them. Every single interaction poses a risk."

Small but costly ground-handling mishaps can be easily avoided however, as the majority can be attributed to factors companies can control, such as awareness, accountability, training and human error.

### Mitigate risks

Taking it right down to basics, simple things can be put into place to help avoid ground-handling incidents. For example, VanAllen Group advises clients to implement foot buffer zones, brightly colored cones, wing walkers and whistles for all ground-handling employees to help lower the risk of hangar rash.

New systems and technologies are also playing a role in lowering risks. Smart cones, for example, have sensors that set off an alarm if something comes too close or breaks a connection between them. Then there are robotic tugs, which give operators a chance to maintain a perspective, as Don Henderson, VanAllen Group's managing director of consulting services, explains. "As an operator, you're no longer stuck watching from a fixed position at the front of the airplane; you can walk away, stop the tug to walk around the airplane, and check positioning. These tugs can also swivel 360° around the nose, as they don't have a tow bar," he points out. "They're particularly valuable when you're maneuvering the airplane inside a hangar with tight spaces."

But no matter how high-tech your equipment may be, a safety-first mentality from the top of any organization is what's at the heart of exceptional ground-handling safety. Joe McDermott, senior business aviation consultant, Global FBO Consult, says, "All too often in organizations, CEOs, managers and owners leave safety to people further down the chain. When that happens, and the person given responsibility asks for a budget for training, the people at the top don't understand it's importance and dismiss it. This leads to incidents," he points out.

### Changing perceptions

Perceptions around ground-handling safety have been improving in the industry however, with many more executives taking an active interest in ensuring high safety standards. Many are looking to guarantee that international safety standards such as staffing requirements, safety equipment and work hours are met, as well as making sure robust training and handling processes are in place.

For example, operators can help ground handlers better identify hazards and mitigate risk by incorporating a safety management system (SMS) into all aspects of operations.

# INCREASE YOUR EFFICIENCY!



Embraer Lineage 1000 E with TWIN 7500 NG



Citation X with M528

## The world's most compact and powerful electric driven tug.

Thanks to the industrial remote control maneuvering an aircraft in and out of the hangar is an easy and effective operation for only one person. The compact design allows up to 60% higher utilization of the hangar. When do you start maneuvering airplane the innovative way?

**mototok**  
easy moving

Innovative remote controlled electric driven tugs

Contact us: +49-2151-65083-82 • [www.mototok.com](http://www.mototok.com) • [info@mototok.com](mailto:info@mototok.com) • [facebook.com/MototokTugs](https://facebook.com/MototokTugs)

**cat airservice**

Cat Air Service AG  
General Aviation Center  
8302 Kloten / Switzerland

[www.cat-airservice.com](http://www.cat-airservice.com)  
+41 43 816 08 08



Executive Ground Handling | Crew Services | Passenger Services



## Texas FBO leads the way in IS-BAH registration

American Aero FTW, the aviation services provider and FBO at Ft Worth Meacham International Airport, became the first organization to achieve IS-BAH Stage 3 registration in late 2018. Stage 3 is the highest level of certification an FBO can achieve regarding ground-handling safety.

Stage 3 registration focuses on a company's culture, verifying that safety management activities are fully integrated into the daily routine and that a positive safety culture is being sustained. Heath Barnett, safety officer at American Aero, walks us through the specific steps the company took to achieve Stage 3 registration:

### Retooling and expanding safety performance indicators (SPIs)

"The challenge to make the leap from Stage 2 to Stage 3 was to retool and expand our SPIs. We had to take a 'deep dive' into years of data to match where our safety targets, alert levels and goals should be for an operation that has been measuring safety performance for five years. We also knew that Stage 3 required that our SPIs reflect continuous improvement over where they were at our Stage 2 audit."

### Increased emergency response plan drills

"Any organization seeking to maintain the IS-BAH standard must insist on quality in emergency procedures, based on the size and scope of the operation. Part of that is how often you drill and, most importantly, what have you learned, changed or added from performing those drills."

### Strengthening the relationship between safety manager and accountable executives

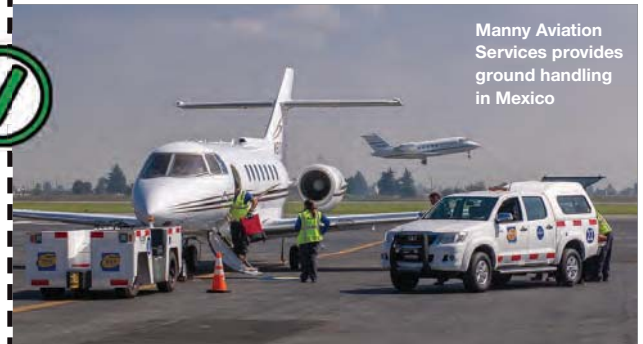
"For a safety culture to exist, all levels of management must be involved, committed and accountable. As part of Stage 3, we strengthened that connection with increased briefings and we optimized the pipeline of safety information presented to the accountable executive."

### Ensuring a 'just culture'

"One of the main tenets of IS-BAH is a shared accountability. An organization that seeks to maintain a just culture and a positive work environment must hold itself accountable for any negative outcomes created by errors or oversight in the training it provides, or in the systems and procedures it puts in place. We encourage our staff to report safety issues and mistakes that are committed by their superiors. This fosters the idea that anyone is capable of making a mistake and anyone can bring it up for discussion for learning purposes, without fear of retribution."

### New technologies and procedures

"We brought in a third-party manual service. Due to the constant change to standard operating procedures, we needed to streamline and publish new versions of our manual after each revision. We also continued our development of computer software to aid in tracking SPIs and risk assessments."



"Otherwise they're reactionary, rather than proactive," says to Heath Barnett, safety officer at American Aero FTW.

Manny Aviation Services in Mexico is just one example of a ground-handling and flight-support services company that has an effective SMS and reporting program in place, but it goes even further in its pursuit of safety.

"We have a continuous incident reporting system in place to avoid dangers and hazards – something all our staff are involved with – but we also audit our vendors regularly, as this helps us improve our quality and safety management system," says Emilio Padilla Escoto, lead SMS at Manny Aviation Services. "When it comes to our standard operational procedures, we also audit and measure our development on a daily basis," he highlights.

Staff training is paramount of course, but engagement in the safety process is key – it's not enough to just run employees through their training and send them on their way. "You need a good oversight policy to ensure everyone has had the right, recurrent training," adds McDermott. "If you don't have this in place, then all the training will go out of the window as people get sloppy – it's human nature."

Furthermore, it's good to engage with staff in different ways around safety. For example, Jet Aviation provides regular local reports on safety issues at its regular town hall meetings. "Our SMS makes it easy for employees to report important safety-related information and offers options for confidential and anonymous reporting. Sharing these reports during town hall meetings has really helped improve employee interest and involvement," explains Marc Pieters, Jet Aviation's director of quality, EHS and aviation security, Europe.

### Safety scheme

But of all the initiatives, schemes and projects developed to support ground-handling safety, VanAllen Group's Henderson believes the US National Air Transportation Association's (NATA) Safety 1st scheme has probably done the most to lower risk in ground handling and improve education for operators, at least in the USA.

Safety 1st, a robust training platform with certification, began back in the 1990s with training on VHS tapes, moving to a fully digital system in 2008.

"We've come a long way, from a time where there was no standardized training, to Safety 1st being used in 1,600 locations around the world. Since going online, we've trained more than 40,000 people," enthuses Michael France, NATA's managing director of safety and training.



Left: Heath Barnett, safety officer at American Aero

And Safety 1st continues to evolve. In March 2019, the next generation of Safety 1st was launched, which, alongside a revamped system and new-look software, takes a new approach to training.

“Ground-handling training’s always been looked at as an ‘all or nothing’ approach, something I call a certification mentality,” says France. “We have this in aviation because we’re a highly regulated industry and need to have those boxes checked. But this can lead to training being viewed as just another compliance obligation.

“So we’re now taking an employee development approach to training, a ratings-based approach. Think about the badges you could get at Scouts. We’re doing something similar, where they can earn ratings as they prove they can safely do certain tasks.”

France explains that this does two things. First it provides feedback to the employee, enabling them to continually achieve as they learn. Second, for the company, it can take its time training staff – there’s no longer a need to hurry someone through the course so they can get a certificate to show they’ve been trained, as ratings are awarded for each area the student works on.

## IS-BAH

The introduction of the International Standard for Business Aircraft Handlers (IS-BAH), developed by IBAC and NATA, was another major turning point in ground-handling safety standards.

Considered by many as the gold standard in ground-handling safety, IS-BAH is a set of global industry best practices with an SMS at its core, and follows the structure of the International Standard for Business Aircraft Operations (IS-BAO) program, as well as incorporating NATA’s Safety 1st training program.



**“Ground-handling training’s always been looked at as an ‘all or nothing’ approach, something I call a certification mentality”**

Michael France, managing director of safety and training, NATA

Above: **NATA’s Safety 1st Professional Line Service Training** covers ground servicing, general fuel handling, aircraft towing, customer service and aviation security

Currently 163 locations across the world have successfully achieved Stage 1 IS-BAH registration, with 52 of those moving on to Stage 2 and one gaining Stage 3 registration (see *Texas FBO leads the way in IS-BAH registration*, page 53).

IBAC continues to work on ensuring robust ground-handling safety and regulations for the business aviation industry, as Terry Yeomans, program director for IS-BAH, explains: “2018 saw the culmination of four years’ work at the International Civil Aviation Organization [ICAO]

Ground Handling Task Force, in which IBAC

participated with the wider aviation community in the development of the first *Ground Handling Manual* aimed at assisting ICAO States with guidance material on the possible oversight of ground-handling services providers. We continue to work with member associations to ensure that regional and national regulatory bodies consider the business aviation sector at all times when developing ground-handling regulations.” ○

## Lessons learned



Experts share their tales of ground-handling incidents and how they could have been avoided

**Joe McDermott, senior business aviation consultant, Global FBO Consult**



**What happened:** “A few years ago I saw a ramp agent securing some aircraft ahead of an approaching storm. Running out of chocks, he took a set from an impounded aircraft [not his FBO’s responsibility], thereby leaving the aircraft free to wander the ramp once the storm got up. It was like a cannonball on the deck of an old frigate!”

**How it could have been avoided:** “The ramp agent should have informed the operations manager that he did not have sufficient chocks to ensure all aircraft were safe during high winds. In an emergency situation, sand bags are the old reliable on the ramp and there was a supply of them not too far off.”

**Don Henderson, managing director of consulting services, VanAllen Group**



**What happened:** “I saw a Dassault Falcon 50 just sitting there with a car wedged underneath its wing. A passenger had gone zipping across the ramp and tried to fit their car under the wing, but got stuck. Thankfully no one was hurt, but the airplane was definitely not flyable.”

**How it could have been avoided:** “The passenger should never have been allowed near the ramp unescorted. The cost of repairing his aircraft was more than three times the annual salary of a ramp employee. The investment in additional personnel for ramp escort would more than offset the repair expense.”

**Terry Yeomans, program director, IS-BAH**



**What happened:** “Examples of typical incident reports we receive include an aircraft’s wingtip striking a standing pole while being towed, contact with another aircraft while being marshalled into parking, and a tow tug colliding with a wing while turning.”

**How it could have been avoided:** “There are clear similarities between these incidents. The key is providing a tool, such as IS-BAH, which enables ground handlers to seek out possible weaknesses in their systems, processes, policies and procedures – and develop suitable mitigations to try to prevent a costly loss event.”





**Executive.Luxurious.Reliable**  
*Travel like no other*

To access the ultimate concierge services, please contact us on:

Birmingham: 0121 663 1450  
[jetcentre@xlr.birmingham.com](mailto:jetcentre@xlr.birmingham.com)

Liverpool: 0151 317 9325  
[jetcentre@xlr.liverpool.com](mailto:jetcentre@xlr.liverpool.com)

Exeter: 01392 354 995  
[xlr@exeter-airport.co.uk](mailto:xlr@exeter-airport.co.uk)

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



As Sino Jet becomes the first business aviation operator in mainland China to achieve IS-BAO Stage III, *Business Airport International* talks to Chris Wu, president of Sino Jet Beijing, about the company's achievements and its hopes for the future

Words | Helen Norman and Hazel King



# Rising **star**



**F**ounded in 2011, business jet charter operator Sino Jet Group has grown substantially in the past few years, with more than 350 staff now employed at its Beijing and Hong Kong headquarters. “Our customers view Sino Jet as a multinational corporation, due to our global outlook and dual headquarters,” explains Chris Wu, president of Sino Jet Beijing. “We are an international team at Sino Jet; we can understand the needs and cultural preferences of our clients, both Asian and Western. Our competitive advantage is this global approach that enables us to communicate with the authorities and serve our clients inside and outside of China.”

It is this focus on offering an international standard of service that has led to Sino Jet becoming the first operator in mainland China to achieve International Standard for Business Aircraft Operations (IS-BAO) Stage III. This is no mean feat: achieving Stage III status is a six-year process that requires stringent adherence to the directives set out by the International Business Aviation Council (IBAC), which runs the IS-BAO scheme. “There is, of course, no margin for error and the long timeline is a true test of the company’s practices, training, staff knowledge and commitment to safety,” says Wu.

***“There is, of course, no margin for error and the long timeline is a true test of the company’s practices, training, staff knowledge and commitment to safety”***

Chris Wu, president of Sino Jet Beijing

To gain Stage III accreditation, Sino Jet had to meet three main criteria: develop standard operating procedures (SOP), ensure compliance across the company, and establish a Safety Management System (SMS). Wu continues, “The SOPs are used for international airspace operations and involve performance-based navigation, CPDLC [controller-pilot datalink communications], AD-S or ADS-B. Sino Jet established and maintains SOPs for international airspace operations, and we ensure that all crew conducting such operations are trained in use of the SOP and carry a copy of the operating procedures on board the aircraft.”

For compliance, Sino Jet maintains a process that ensures flight crews are familiar with national, regional and international air navigation procedures and associated requirements prior to the commencement of flight into such airspaces. “The process also ensures that flight crews comply with the requirements of their State of Registry of Operations, ICAO Standards and Recommended Practices, published regional procedures and the regulations of each state in which they intend to land or overfly, as are pertinent to the performance of their respective duties in the operation of the airplane,” Wu adds.

## Safety management system

The SMS developed by Sino Jet as part of IS-BAO Stage III is the most comprehensive part of its accreditation and is there to ensure that a positive safety culture is sustained by integrating safety management activities into every area of the company’s business.

“The top management is fully aware of the human and organizational factors that endanger operations and continuously make decisions mindful of those factors; management drive the SMS process and vigorously seek excellence,” Wu explains. “Responsibilities for safety and contributing to the SMS effectiveness are fully embedded throughout all levels of Sino Jet’s organization, and safety management activities are continually monitored, evaluated and improved when opportunities are identified.”

As part of the SMS, Sino Jet has introduced policies and procedures to mitigate safety risks, and these are periodically reviewed for “applicability and effectiveness”, according to Wu. “These policies and procedures are modified when needed, to mitigate the predictable human, operational and organizational limitations,” she adds.

## Data monitoring

Another essential part of achieving IS-BAO Stage III accreditation is to gather, store and monitor operational data and then comprehensively evaluate it to promote safety, which Sino Jet has successfully done through its flight data monitoring (FDM) program.

“FDM is a method of capturing, analyzing and visualizing aircraft movements from one point to another,” Wu says. “Information such as flight control inputs, which can be caused by pilots manually or other aircraft systems on board, are recorded. Through analyzing the flight data, we can proactively identify deviations from our SOPs



## Safety culture

**Sino Jet has introduced four key steps to show its commitment to improving operational safety:**

**1. Flexible culture:** To be adaptive to changing demands and operational environments, to adjust policies and procedures to enhance safety performance.

**2. Just culture:** Where non-punitive reporting is encouraged, staff can report deficiencies, safety hazards or raise safety concerns or errors without fear of retribution. Appropriate safety actions can then be taken in a timely manner.

**3. Learning culture:** Where we learn from our own mistakes as well as those made by others, at the same time providing timely information on safety issues to all staff.

**4. Informed culture:** By applying appropriate risk management systems and processes as part of our decision making. This includes appraising new systems and procedures for any safety implications so we can identify and manage potential hazards.



or areas of risk – and measure and review our current safety margins. Subsequently we can identify ways to improve flight safety and operational efficiency within our organization, such as through specific training or amendments to SOPs.

“Our FDM program has also fortified our safety culture,” Wu continues. “‘Just culture’ has been promoted widely within the Sino Jet group, encouraging our staff to make safety reports to identify safety hazards without fear of punishments. Some hazards are unnoticeable and flight data analysis helps reveal these hazards, providing lessons throughout the organization. The effectiveness of the program has earned the trust and enhanced safety commitment by our employees.

“Ultimately, the goal of FDM is to improve overall safety, increase maintenance effectiveness, and reduce operational costs, which brings tremendous benefits to us and our clients,” Wu comments.

## Forward thinking

Aside from achieving IS-BAO Stage III accreditation in 2018, the company has received several more certifications over the past few years, including CAAC Air Operator Certificate, CAAC-145 Maintenance Organization Certificate, EASA Commercial Air Transport Authorization, and Cayman Islands Continued Airworthiness Management Certificate.

“We also launched a new strategic partnership with a ground service company in Chengdu in June 2018, a partnership with aircraft maintenance company Ameco in April 2018, and we have strategic brand partnerships with luxury watch brand Hublot and well-known Chinese tea maker Hxytea,” explains Wu. “On top of this, we’ve





Above and above left: Sino Jet ground-handling staff carrying out pre-flight safety checks

Below: Executives from Sino Jet and Hxytea celebrate their brand partnership

***“In the face of the economic slowdown and industry mergers and acquisitions, Sino Jet must differentiate as a ‘one stop’ business jet management company”***

Chris Wu, president of Sino Jet Beijing



Sino Jet headquarters in Beijing

received awards such as best employer, best operator and best travel service provider.”

According to Wu, the Sino Jet fleet continues to grow, with the company currently managing 40 aircraft, and new offices have opened in Shanghai and Guangzhou; and new service bases opened in Hangzhou, Chengdu, Xiamen, Zhuhai and Shenzhen.

“Looking ahead, we plan further expansion into the Greater Bay Area, China, Southeast Asia, the USA and Europe,” she continues. “The market is still young in Asia, with significant opportunity for growth. We will continue to develop a service model that aligns with the market’s needs and trends. We will continually look for opportunities to improve and expand, while ensuring we do not lose sight of investment into our greatest asset – our people.”

So, what are the challenges Wu anticipates? “China’s business aviation industry is very young,” she says. “Its rapid growth around 2010 made China the fastest-growing emerging market in the world, however there is a lag on infrastructure and still a lot of growth to be realized. At present, there are around 30 business jets in the Chinese market waiting to be sold, representing around 9% of total volume of the business jet market in mainland China.”

Wu continues, “Challenges relating to parking, airspace, regulatory processes, slots and noise profiling hamper the development of the business aviation market. But this is now changing. While these issues remain a challenge, we see matters improving. Sino Jet is a Platinum Member of AsBAA [Asian Business Aviation Association], whereby we work with other industry players to improve the overall operational landscape for the industry.

“In the face of the economic slowdown and industry mergers and acquisitions, Sino Jet must differentiate as a ‘one stop’ business jet management company. With our extensive experience, the team can accurately provide personalized and high-quality services for Sino Jet customers. From flight planning to aircraft maintenance, all services are well coordinated and provided with comprehensive solutions that enhance our competitiveness,” she concludes. ○



As a number of new jets enter the midsize sector, *Business Airport International* asks: Is there enough demand for this new generation of aircraft?

Words | **Steve Johnson**

# Factory

A

wave of new medium to super midsize jets is arriving in the business aviation market. With more creature comforts, versatile layouts and high-tech facilities on offer, relaxing, dining, working, conferencing and sleeping on board a medium-sized jet (MSJ) are going to be even better experiences for flyers.

Given that the essential purpose of executive air travel is about convenience, flexibility and time saving, the main appeal of the new aircraft may be their extended range. At the top end the Bombardier Global 7500 can fly non-stop from Los

Angeles to Dubai (7,246 nautical miles). The Cessna Citation Longitude and Embraer Praetor 600 can fly New York to Paris with 3,500 nautical mile and 3,900 nautical mile capabilities respectively.

"Range is an important differentiator," says Adam Twidell, CEO of Private Fly. "We have seen an increase in travelers choosing higher-priced non-stop flights over less expensive, fuel-stop flights. That hour on a fuel stop could save thousands of dollars, but getting there faster is worth more to travelers. For example one client flying from Miami to London could have flown for US\$75,000 one-way with a stop, but they chose to pay US\$90,000 to go non-stop, save time and have uninterrupted travel."





What do these new MSJs mean for the business aviation market generally? Will there be a growing demand for these types of jets in the market? Dominique Cristall, senior public relations at Bombardier Business Aircraft, believes that demand for MSJs is already high as they offer the best of both worlds when it comes to affordability and size. “Our company stimulated the medium category market with the Challenger 350, which is one of the best-selling aircraft of the past decade,” he says. “Meanwhile the Challenger 650 is the most popular aircraft in its class. These aircraft offer low operating costs and can accommodate 8-12 passengers very comfortably.”

Looking at recent figures, Avinode says that 2018 saw a strengthening in the MSJ sector, with charter enquiries for these jets up by 35% in the US and 28% in Europe. Harry Clarke, senior commercial analyst, Avinode Group, says, “MSJ departures from China grew by 10% in 2018, whereas in the Middle East midsize trips shrank by 9% in the same period. The most requested European route for medium jets in 2018 was Nice to Moscow Vnukovo. If you exclude Russia, the most requested European route was Luton to Nice in France.”

Richard Koe, managing director of market intelligence provider WingX, adds, “The industry is seeing robust growth in the midsize and super midsize segment of around 5% in North America and Europe. Much of this is due to larger aircraft in fleets such as the Embraer Phenom and Citation Latitude jets.”

During the recession, Private Fly says that it was the MSJs that suffered most, as many private customers traded down to small jets, while at the other end of the market the long-range aircraft proved more robust. Twidell says, “It’s

an encouraging sign of market recovery to see thriving competition now taking place in the middle ground, with manufacturers banking on customers wanting to fly further and in larger cabins.”

### Competitive market

If activity and demand is up for medium-sized jets in Europe and the US, what does this mean for prices? Group chief marketing officer at Gama Aviation Duncan Daines comments, “In Europe, an oversupply of MSJs flying at near daily operating cost [DOC] has created a buyer’s market. Charter operators, in Europe, at least, won’t be seeing much, if any improvement in margin.”

Oliver King, CEO of Avinode Group, adds, “The hourly offered prices for MSJs in Avinode have remained flat across the past 12 months, with the only exception being a small increase associated with rising fuel prices. What we are seeing reflects a growing demand for midsize business jet charter, based on capacity and range attributes.”

Could we be heading for a much tougher competitive position for the manufacturers of MSJs and is there enough demand in the business aviation market for all the new MSJs that are set to enter the sector over the next few years? The MSJ sector certainly seems to be a magnet for competition, with Gulfstream, Bombardier and Dassault well embedded with the 280, 350 and 2000 respectively. Koe adds, “The MSJ market also includes Cessna, with its Citation Latitude at the lighter end of the sector and the super midsize Longitude, and then Embraer is reinforcing its Legacy line with the imminent Praetor 500 and 600. This is all great for customers in the short term, but it’s difficult to see how all these production lines can survive.”



Above: The state room of the Bombardier Global 7500

Right: The dining area offers a high-end experience

## “The industry is seeing robust growth in the midsize and super midsize segment of around 5% in North America and Europe”

Richard Koe, managing director at WingX

### New kids on the block



#### Pilatus PC-24

**Passengers:** 8

**Range:** 2,000 nautical miles

**Price:** US\$9m

The first customer delivery for the PC-24 was in February 2018 and Pilatus is set to reopen its order book in 2019. There are currently more than 20 in service. It is an extremely versatile aircraft and has the ability to land on short and unpaved runways. It also has an easily reconfigurable cabin.



#### Embraer Praetor 500/600

**Passengers:** 9/12

**Range:** 3,250/3,900 nautical miles

**Price:** US\$17m/US\$21m

Certification for the 600 is expected in the second quarter of 2019, and for the 500 in the third quarter. The 600’s extra range is the result of more aerodynamically efficient winglets and additional fuel capacity. The aircraft have a modern interior inspired by Brazil’s beaches. The jets’ flight decks will feature an industry-first vertical weather display, ATC-like situational awareness with ADS-B In, and predictive windshear radar capability.

These are some of the recent entrants to the midsize and super midsize business jet market





## Does the Bombardier Global 7500 live up to the hype?

Positioned by Bombardier as the longest range, largest, most luxurious business jet ever built, the US\$72m Global 7500 appears to be peerless. That is maybe until the arrival of the Gulfstream G600. If you don't need to upscale to an ACJ319neo large jet, you will be able to fly further, higher and faster in the Global 7500 and save US\$18m or thereabouts on the purchase tag.

According to Bombardier the aircraft will, under certain operating conditions, be able to connect New York to Hong Kong, or Singapore to San Francisco, non-stop. The company's headline message is that the Global 7500 is "setting the standard for a new category of large business jets". With its four distinct, configurable living spaces, there is probably no direct comparison. In terms of seating comfort alone, the new Nuage seats with tilt/recline and floating trackless base, are particularly special. No one would doubt that Bombardier wants everyone to feel suitably cosseted while on the aircraft.

The Global 7500's 7,700 nautical mile range and ability to make 16-hour non-stop trips may well be the deciding purchasing factor. However, taking a rational view, most business jet flights do not get near endurance limits, so is there a need to buy such superfluous, rarely used capability? Besides which, some passengers, and indeed crew, may prefer a short stop-over.

Range requirements aside, the Global 7500 has plenty more tricks up its sleeve. One is its advanced wing design that helps ensure a smooth ride. The design also provides a steep approach capability and short field performance. When you fly up to 19 passengers and want to land as close as possible to their final destination, the Global 7500 is right on the money. For new and emerging markets where accessibility and runway facilities may be limited, such prowess may well help convert customer interest into sales orders.

The Global 7500's award-winning, high-tech cabin facilities are ultra-impressive in every dimension. The cabin is 8ft wide and nearly 55ft long (2.5 x 16.5m) and includes a full-size kitchen and conference, entertainment and bedroom suites. There is also a dedicated crew rest facility and an in-flight accessible rear baggage area.

Bombardier is reporting great interest in the Global 7500. It first entered service in December 2018, however at time of writing Bombardier isn't revealing any order numbers for the jet. It may be early days to talk about the longer-term future for the aircraft, but according to reports the company believes demand will increase. The company expects to deliver 15-20 aircraft of this type in 2019, followed by a ramp-up to 35-40 in 2020.



### Cessna Citation Longitude

**Passengers:** 12

**Range:** 3,500 nautical miles

**Price:** US\$24m

The first deliveries of the Longitude are expected in early 2019. It is the most tested Citation in the company's history, with 11,000 test points. On average it has 3,000 fewer parts than other Citation aircraft, which means maintenance bills are lower.



### Gulfstream G500/G600

**Passengers:** 19/19

**Range:** 5,200/6,500 nautical miles

**Price:** US\$44.5m/US\$58m

Gulfstream delivered the first G500 in September 2018 while the company intends to deliver its first G600 business jet during the first half of 2019. The

G600 has the longest cabin in its class and the interior can be configured into three living areas and a crew rest. The G600 is up to 23% more efficient than other aircraft in its class and the G500 is the first aircraft certified to Stage 5 noise standards.



### Bombardier Global 5500/6500

**Passengers:** 16/17

**Range:** 5,700/6,600 nautical miles

**Price:** US\$46m/US\$56m

Bombardier unveiled the Global 5500 and 6500 aircraft in May 2018. The company is currently on schedule for first deliveries in 2019. The aircraft offer up to 13% improved fuel burn compared with the Global 5000 and Global 6000. The aircraft feature ultra-high-resolution entertainment systems and safe access to baggage throughout the flight.

## MIDSIZE JETS

Tom Perry, vice president of sales for Europe, Textron Aviation, manufacturer of the new Cessna Citation Longitude, which is set to enter service this year, believes that there is enough demand in the market for the new MSJs: “Strong customer activity in this sector has largely been driven by new product development, which will continue as new aircraft such as the Citation Longitude enter into service. The super midsize Citation Hemisphere has generated a lot of interest; it is the first clean-sheet aircraft this segment has seen for over 20 years.”

Meanwhile Gulfstream Aerospace Corporation is keeping a close eye on the market to ensure its products meet customer demands. Heidi Fedak, director of corporate communications, says, “Gulfstream is primarily focused on the Gulfstream G500, which entered service in September 2018, and the certification of its sister ship, the Gulfstream G600, but we continuously evaluate the products and services we offer customers. This could not be accomplished without a robust research and development program, which involves the work of 1,500 engineers.”

Duncan Daines, group chief marketing officer at Gama Aviation, says that some of the newest entrants to the market, including Cessna’s Citation Longitude, the Praetor 500 and 600, and the Gulfstream G280 will be competing in a highly competitive space: “With NetJets placing an order for Longitudes, Cessna will be hoping that this translates into further sales and secures its position in the market. The G280, effectively a small G550, is too good an aircraft not to compete. For all these aircraft the question may not be about competing with each other but about competing with the continued popularity of older types of aircraft that owners have recently upgraded with technology including FANS 1/A, CPDLC and ADS-B Out.”

### Old versus new

New aircraft are exciting for business aviation overall, but can they compete with well-maintained, more affordable, pre-owned aircraft? Embraer believes MSJs have a place in the market due to their quality. Stephen Friedrich, chief communications officer at Embraer Executive Aviation, says, “These MSJ aircraft offer full stand-up cabins, near home-quality in-flight entertainment with advanced avionics, higher fuel efficiency and all-digital flight controls. Furthermore, with more MSJs approaching the 4,000 nautical mile sweet spot range, more efficient and greener engines, advanced onboard



Above: **The Embraer Praetor 600 boasts a luxury finish**

**“Strong customer activity in this sector has largely been driven by new product development”**

Tom Perry, vice president of sales for Europe at Textron Aviation

navigation, predictive vertical weather radars and ultra-precise fly-by-wire controls, more remote airports can be reached than ever before.

“ADS-B Out and In data displayed in the cockpit – to offer pilots an air traffic control perspective, will further improve operations in remote areas,” Friedrich continues. “In destinations such as La Môle – St-Tropez Airport, such technologies help provide excellent short runway performance and enable medium-size aircraft to operate with more passengers.”

For the US in particular, the compelling event that could stimulate the MSJ market will be the FAA’s January 1, 2020 deadline for aircraft to be equipped with ADS-B Out. King says, “Meeting these requirements will be uneconomic for some older MSJ models, and consequently these aircraft will be withdrawn from service. This should lead to an uptick in charters for MSJs, which will create demand for these new aircraft from charter operators.”

Another thing to consider is the impact, if any, that new MSJs will have on airports. As a number of these new aircraft have longer ranges, will routes change? Will there be less demand for tech stops? Gary Forster, FBO business development executive, Luxaviation Group, says: “It is possible that the latest generation of MSJs will have an impact on routes due to their additional range capabilities. However, we don’t anticipate a major shift because the market is mature.

“There may be additional aircraft as fuel efficiencies improve economics, but infrastructure is largely unaffected by the growth of the MSJ market. A few smaller airports, may see more activity because runway performance is improving as a result of new technologies. Such airports may even see international flights, leading to additional customs and immigration requirements.”

Whether there is enough demand in the business aviation market for all the new MSJs to survive remains to be seen. Any substantial growth in the use of MSJs will be fueled by the growth of the global economy and where that growth is happening – most notably in China, India and South America. Concluding, Twidell says, “The super midsize segment is where most new development is taking place currently. The transatlantic pathway is a key focus here, plus routes between Europe and the Middle East, and longer pairings in North and South America, reflecting the importance of developing economies.” ○

Right: **A mock-up of the interiors of a Embraer Legacy 500**







- Quick turn times for aircraft and passengers
- Competitive ground handling services
- Easy, uncongested access
- Extensive experience with all kinds of aircraft
- Contract fuel arrangements
- 24/7 Customs and Border Protection services
- Strategic location

## Location, location, location. (and services, services, services)

### *The most experienced rely on Bangor.*

Quick, efficient and cost-effective service has made Bangor International Airport and Bangor Aviation Services the preferred first stop for North Atlantic flights into the United States. And the first choice for U.S. pilots flying to Europe.

Strategically located, Bangor also provides 24-hour refueling and fast, friendly customs services. So you're in, out, and on your way in no time.

#### **CONTACT FREQUENCIES:**

Unicom frequency: 122.95 (0500-2200 hrs.)

ARINC frequency: 132.00 (BGR Ops, 24 hrs.)

#### **CONTACT INFORMATION:**

Tel: (207) 992-4582

Fax: (207) 945-5998

[FlyBangor.com](http://FlyBangor.com)



## DC AVIATION MALTA PASSION FOR QUALITY



Details make the Difference. 24 hours a day, 365 days a week, DC Aviation Malta provides business and corporate aircraft, crew and passengers dedicated VIP handling at Malta International Airport.

Founding members of the MBAA  
Members of EBAA, NATA & NBAA  
DC Aviation Malta Ltd.  
Malta International Airport  
PO Box 23, Gudja,  
LQA 5000, Malta

DC Aviation Malta Ltd.  
Tel +356 21 37 5973  
[www.dc-aviation.com.mt](http://www.dc-aviation.com.mt)

## Experience our Passion for Quality.

For Business Jet Handling: [malta-fbo@dc-aviation.com.mt](mailto:malta-fbo@dc-aviation.com.mt)  
For Business Jet Charter: [chartersalesmla@dc-aviation.com.mt](mailto:chartersalesmla@dc-aviation.com.mt)









Jean-François Deltour, airport manager at Courchevel Altiport, discusses his love for aviation, building a new FBO, and the challenges that come with running the highest airport in Europe

Words | Kirstie Pickering



**C**ourchevel Altiport (LFLJ) is situated in the picturesque setting of the French Alps, nestled within the mountains and serving its namesake ski resort. The airport is famed for its short runway, which measures just 537m (1,760ft) and has a gradient of 18.66% in order to help slow aircraft landing in icy conditions. It is thought to be the steepest runway in the world.

Jean-François Deltour has been airport manager at Courchevel since November 2017, after previously serving as deputy manager of the airport and airport manager at Quiberon Airport in western France. His passion for all things aviation blossomed as a child, leading him to pursue a career in the industry.

"I have loved aviation since my childhood," says Deltour. "After studying for management qualifications, I decided to specialize in air transport. At the end of my studies in 2013, I completed an internship at the famous Saint-Tropez Airport [LFTZ], where I was in charge of different projects such as the protection of the platform against floods and Global Navigation Satellite System [GNSS] implementation. My integration within Courchevel Altiport was a logical next step in my career."

Right: The runway has a unique 18.66% gradient

Below: The altiport's runway is constantly cleared of snow

## Rules and regulations

**Due to its difficult location in the French Alps, there are special regulations put in place by the French Civil Aviation Authority when flying to Courchevel Altiport.**

- Night flights are prohibited
- Prohibition of laps between 12:30pm and 2:30pm
- Limitation of the opening hours of the ground except relief from 9:00am to 7:00pm unless authorized by the operator
- For commercial private jet charter, the usual minimum stopping distance for the aircraft is multiplied by 1.6 to create the minimum landing distance required for Courchevel
- Only specially trained pilots can land at the altiport. Training includes five flight hours of instruction on-site and three hours of theoretical lessons. This qualification must be renewed if unused for six months



A pilot approaches Courchevel Altiport's unique runway





The airport sits at an altitude of 2,007m (6,590ft), providing easy access for passengers heading to the nearby popular ski resort. During winter, Courchevel Altiport experiences around 6,500 aircraft movements on average, dropping to around 1,000 movements for the summer season in July and August. January, February and March account for 70% of all winter flight movements, with approximately 70 flights landing and departing each day.

"Skiing isn't the only reason people fly to Courchevel," says Deltour. "Customers often come for a sightseeing flight over the Alps, skydiving and for the flight school. It is also popular for those wishing to visit the local palaces, famous hotels, restaurants, spas, luxury shops and beautiful surrounding nature."

### Snowy scenes

Being situated at such a high altitude brings daily challenges to Deltour's role as manager that most airport bosses would never have to face. Courchevel regularly experiences temperatures of around -15°C (5°F), meaning heavy snowfall and turbulent weather is frequent.

A recent airplane crash at the airport at the top of the runway demonstrates the challenging environment that the airport sits within. There were no serious injuries, but the aircraft was severely damaged.

***"I want to improve the skills of our employees, join the EBAA, refresh the airstrip, and enlarge our site infrastructure"***



"The weather can change really quickly," says Deltour. "We can have bad weather in the morning with fog, clouds and wind, but great weather in the afternoon. This creates challenges that are unique to an airport such as Courchevel as snow needs to be constantly cleared from the runway to keep it safe for take-offs and landings."

"We overcome this with great expertise from a competent, involved and motivated team that is trained and skilled in multiple roles. We all work together to make our customers happy and ensure everyone's safety."

These unique challenges mean not all business aircraft can fly to the airport. The most common jet arriving at the hub is the Pilatus PC-12, which Deltour believes to be the best aircraft for landing on short runways. Other jets that are popular with business travelers, such as Falcon and Citation offerings, are banned from the airport because of the short, challenging runway and noise abatement regulation.

All types of helicopters can land at Courchevel, however, with this type of aircraft accounting for 70% of all flight activity during the peak winter season. Many helicopters landing at Courchevel are direct transfers from the nearby airports of Chambéry, Grenoble, Geneva or Annecy, which can accommodate a wider variety of jets.

### Customer care

Around 10,000 passengers arrive at the airport every winter. Courchevel Altiport has plans to evolve its current customer offering to meet growing passenger demand. Recent developments include refreshed runway markings and a new reception desk, but there are bigger plans in the pipeline.

"In order to become a popular business aviation destination around the world, we are looking to expand as much as possible," comments Deltour. "We are planning to construct a business aviation terminal with all associated services such as hangar space, concierge and catering – hopefully one day becoming IS-BAH certified. We will do everything internally and we will not use an FBO brand, instead creating our own brand. We hope that all will be operational for the World Ski Championships in 2023."

"I also want to improve the skills of our employees, join prestigious institutions such as the EBAA, refresh the airstrip, and enlarge our site infrastructure such as adding heliports and car parking areas," he adds.

Deltour predicts there is strong growth potential at the airport, with increases in helicopter traffic; boosted staff competence and therefore improved customer experiences; and improved aircraft performance such as quieter and greener jets, more comfortable aircraft with new embedded technologies, and less fuel consumption.

"What is important to me is increasing long-term customers' loyalty," he says. "In 2019, I also hope to see an increase in flight movements, no serious accidents, and I would like to create events such as seminars, meetings, public air events, unions of business aviation airports and open days at the airport to attract more people to the beautiful destination of Courchevel." ○



# YOUR GLOBAL CONNECTION

**EBACE**  
21-23 MAY 2019 | GENEVA

**Business growth requires a global perspective.** It starts with the latest technologies, trends and ideas, and comes full circle with a world of connections that are key in helping you manage multiple budgets, high-performing teams and large-scale purchases. Find everything you need to make the most informed decisions all in one place: **the 2019 European Business Aviation Convention & Exhibition (EBACE2019)**. Join us at EBACE to build relationships and explore the entire marketplace of options. And leave with the best solutions for your business. Get connected and move forward faster. Visit the EBACE website to learn more and register today.

**REGISTER TODAY ► [www.ebace.aero](http://www.ebace.aero)**



# Rethinking flight planning

**Collins Aerospace** is helping meet the pent-up demand for more robust smartphone capabilities



## Vital statistics

**Clients:** Commercial and military

**Founded:** 1933

**Location:** Offices worldwide including Chile, Australia, USA, Canada, Mexico, India and Singapore

In less than a decade, mobile devices have completely changed flight planning for business aviation pilots. The iPad quickly became the norm in the cockpit – its mobility and size were the ideal transition from inefficient, paper-driven tasks. But smartphones kept getting smarter, their screens bigger and better, and their apps easier to use. It was only a matter of time before pilots wanted their phones to offer all the flight-planning capabilities of a tablet. The challenge that stood in the way of creating the best possible user experience was that it required a whole new way of thinking about app design.

Historically, mobile application development has meant pulling apart existing software and web services and rebuilding bite-sized versions with limited capabilities for users. The same thing happens when you try to force iPad apps into being smartphone apps. That's beginning to change with the adoption of mobile-first design. It finally puts the device we have all come to depend on front and center in the development

process. For pilots, this means the apps they already love and rely on every day to support critical aspects of their job don't lose any functionality just because they are using the phone version. Now they are designed with mobile in mind first.

This doesn't just mean the smartphone version of an app will now provide pilots the same accessible data as the iPad version. With mobile-first design, predictive and prescriptive actions are continuously taking place to make the data as valuable as possible.

It learns from previous decisions and anticipates likely desired outcomes to perpetually fine-tune what is presented and why. Its focus is to provide a user experience that is actually based on users' experiences.

But this isn't just a big deal for pilots. When flight department managers select connectivity providers, they are also effectively choosing the apps that will be used throughout their operations. Schedulers and dispatchers, maintenance technicians, ground operators and international trip personnel

Above: iPad flight plan apps are an important tool for pilots

all reap the benefits of mobile-first designs that increasingly unleash them from their desktops and laptops. They can be out in the field, confident they won't have to run back to the office because an app doesn't provide all the same capabilities the PC version does. They will be able to seamlessly adapt to the sudden information changes that are routine in business aviation because their trusted apps will adapt, too.

With the nature of mobile-first apps, a more seamless world opens up – where challenges are both reacted to more efficiently and anticipated more effectively. Operational pain-points become less painful.

Flight planning and trip management become fluid, flexible and simple. Data is more reliable. Pilots are more informed. Operations are more cost-effective and passengers are happier. ○

**COLLINS AEROSPACE**

To learn more about this advertiser, visit [www.ukimediaevents.com/info/bai](http://www.ukimediaevents.com/info/bai)

Reader Inquiry Number 101

# Full services

**Medavia** offers a one-stop shop for all things aviation in Malta

## Vital statistics

**Headquarters:** Safi Aviation Park, Malta

**Founded:** 1978

**Services:** Charter operations, ground handling, flight operational support, aircraft management, Part 145 MRO facility, Part 21J design, Part M continuing airworthiness management organization, cabin crew training organization



**M**alta, a small island in the middle of the Mediterranean Sea, is becoming the go-to hub for everything and anything that is aviation-related. Aviation is one of the fastest-growing industries on the island.

Medavia has been offering the widest scope of aviation services in Malta for over 40 years. The company was always at the forefront in assisting in the growth of the industry locally, with an increasing market share overseas.

Medavia Technics is the newly branded technical arm of Medavia and comprises two main branches: the Part 145 MRO, and the Part 21J Design Organisation (DO).

The addition of new aircraft type capabilities in the Part 145 MRO side of the business, particularly the introduction of the Bombardier Q400 and ATR42/72 series maintenance approvals, led to a marked increase in technical personnel during 2018. This came as a direct consequence of the increased demand for maintenance from new clients.

The Part 21J EASA-approved DO is the only such organization on the island.

With the wide scope of approval, which covers the approval for electrical avionics systems, cabin interiors, structures, external liveries, permit to fly and flight conditions, the DO can approve design changes to both small (CS-23) and large (CS-25) aircraft.

Medavia's 7,000m<sup>2</sup> (75,000ft<sup>2</sup>) hangar facility is directly connected to Malta International Airport. This facilitates maintenance and aircraft storage within the hangar or ramp and makes it easy for the client.



Above: Malta has become an hub of aviation activity

Below: Medavia offers a plethora of services to customers



In addition, Medavia is a ground-handling service provider and charter operator, providing a full range of services for the VIP and VVIP business market. The company's head office and hangar facilities are in the ideal location to provide the best possible service.

In late 2018, in its continuous drive to add and improve on its service offering, Medavia reactivated its Cabin Crew Training Organisation, offering the opportunity to anyone eager to embark on a career in aviation as a cabin crew member. This provides an opportunity to attain an approved EASA accreditation. ○

**MEDAVIA**

To learn more about this advertiser, visit [www.ukimediaevents.com/info/bai](http://www.ukimediaevents.com/info/bai)

Reader Inquiry Number 102



# The Pacific gateway

At its three Pacific locations, **Castle & Cooke Aviation** offers travelers excellence, elegance and convenience

**C**astle & Cooke Aviation is a general aviation provider for an unmatched experience that combines luxurious facilities with first-class operations. With three locations – Van Nuys (VNY) in California, Honolulu (HNL) in Hawaii and Everett (PAE) in Washington state – the company provides its guests with non-stop excellence and elegance in strategic Pacific locations.

## Visit Van Nuys

At Castle & Cooke Aviation's VNY location – one of the busiest general aviation airports in the world – no detail is left unexplored. From the elegance of the terminal to the personalized care each guest receives, the team at VNY provides a luxurious private aviation journey. With more than 210,000ft<sup>2</sup> (19,500m<sup>2</sup>) of hangar space, 205,000ft<sup>2</sup> (19,000m<sup>2</sup>) of ramp space, 45,000ft<sup>2</sup> (4,200m<sup>2</sup>) of Class A office and shop space, and a premier meeting and event space across the ramp from the FBO terminal, Castle & Cooke Aviation has everything required to meet and exceed expectations.

In addition to a luxurious atmosphere and superb customer care, guests to Castle & Cooke Aviation VNY enjoy full FBO amenities and services, including fueling and ground handling, concierge services and catering, rental and crew cars, an elegant lobby and reception area, an executive conference room, a pilots' flight planning center, a pilots' lounge and rest area, and US Customs – all seven days a week. Those requiring customs are taxied direct to the US Customs office, where the Castle & Cooke Aviation team meets guests with passenger cars or concierge vehicles.

## Aloha Hawaii

With under 2,300 nautical miles between VNY and HNL, it's no wonder the two airports comprise the most commonly flown pairing between California and Hawaii. At its Honolulu location, Castle & Cooke Aviation offers all the amenities of its Van Nuys hub, including 5-star facilities, top-of-the-line service from expertly trained staff, and concierge care and catering.



As Hawaii's premier general aviation facility, guests benefit from an elegant FBO terminal complete with 17,600ft<sup>2</sup> (1,650m<sup>2</sup>) of hangar space and more than 7,000ft<sup>2</sup> (640m<sup>2</sup>) of space dedicated to customer care. The facility also offers businesses 60,000ft<sup>2</sup> (5,570m<sup>2</sup>) of Class A office space.

The HNL team is ready to handle the unique demands of international operations with a streamlined system in place for general aviation customs, complete with a welcoming lei (garland) and car service. Customs clearance is handled on the private ramp adjoining the FBO facility and customers can remain in their aircraft during the short process.



Above: **Customers can expect a streamlined service at all three locations in the US**

Below: **The lobby at the Van Nuys hub offers a luxurious setting**

## Flying to Washington

For those looking to conduct business in Seattle or simply enjoy the natural beauty of the Pacific Northwest, Castle & Cooke Aviation PAE is on standby to deliver expert care for pilots, passengers and aircraft alike. Located at the same airfield as Boeing's manufacturing facility, Castle & Cooke is no stranger to handling the complex needs of large aircraft and their entourages.

When selecting the services of Castle & Cooke Aviation in the greater Seattle area, guests enjoy low congestion with all the amenities expected of a first-class, metropolitan FBO. Such services and amenities include de-icing, cargo charter ground services, transportation, concierge care and catering, and an FBO terminal and pilots' lounge.

As a landing rights airport – meaning international operators must be granted landing rights through customs – this Castle & Cooke Aviation location offers a more private customs experience than can be afforded by the Boeing Field King County International Airport of Seattle. ○

## CASTLE & COOKE AVIATION

To learn more about this advertiser, visit [www.ukmediaevents.com/info/bai](http://www.ukmediaevents.com/info/bai)

Reader Inquiry Number 103

# Southern charm

**XLR Executive Jet Centres' FBO at Solent Airport promises peace and tranquillity for all customers**

**S**olent Airport offers itself as the gateway to the south of England and there is a calmness about the airport that beguiles all those that pass through its doors. While the commercial aviation sector remains beset with economic volatility and rising fuel costs, the FBO market – and Solent Airport itself – is continuing to buck the trend.

With fierce competition showing no signs of letting up, and corporate user profiles changing as a new breed of younger traveler now wants to experience the trappings of the private jet world, Solent is showing a resilience to many external factors by maintaining price elasticity in its offering as it continues the march on its competitors in the region. Under the stewardship of the very successful 'boutique' FBO XLR Executive Jet Centres, Solent Airport has established a niche FBO base with the objective of providing a unique and bespoke service offering, something its closest competitors cannot match.

Through various business initiatives, the team at Solent Airport continues to attract the corporate aviation sector with highly competitive refueling and handling deals, along with extensive business aircraft hangarage parking (for aircraft up to Falcon 900 size). With its team of dedicated professionals on hand to support every aspect of a corporate customer's needs, Solent is well placed to capture both regulars to other airports, as well as a new and growing corporate aircraft market.

The airport offers a dedicated passenger and crew lounge with



complimentary refreshments and beverages, along with dedicated apron parking, all without the congestion of competing airports. As with other XLR Executive Jet Centres' FBOs in Birmingham, Exeter and Liverpool, Solent's team can provide weather briefings and local information to aid its clients, as well as providing special rates for catering, chauffeur-driven cars and corporate hotels.

Conveniently located within a 10-minute drive of the M27, and within a 10- to 30-minute helicopter flight to London, Portsmouth, the Isle of Wight and Southampton, Solent's corporate facility provides direct access to the south

Above: **The Solent facility offers business jet hangar space**

Below: **XLR strives to cater to every customer need**



of England from an airport with none of the flying constraints and complexity common at other airports in the region.

While Solent's corporate center is small by comparison to other major FBOs in the UK, what it lacks in size is more than made up by the organization's attention to customer service. Solent sees a bright future and invites potential customers to come and see for yourself. *Business Airport International* readers can take advantage of a 25% discount off all handling and landing fees when you uplift fuel. This offer is valid for multiple use for travel up to and including the end of June 2019 when quoting SABAIQ0119. ○

**XLR BIRMINGHAM**

To learn more about this advertiser, visit [www.ukimediarevents.com/info/bai](http://www.ukimediarevents.com/info/bai)

Reader Inquiry Number 104





# BusinessAir & AircraftforSale.com

## 2004 Gulfstream G550

s/n 5045 ■ N560DM



5045 TT, BR700-710C4-11 Engines on RRCC, Honeywell Epic PlaneView Integrated Avionics Suite, Cert Foxtro Enhanced Navigation, Enhanced Foxtro, FANS-1A/CPDLC/ADS-B Out, Wi-Fi, Forward Galley, Forward Lav, Painted 2011..... **CALL FOR PRICE +1 (562) 989-8800**

## 2013 Cessna Citation Sovereign+

s/n 680-0510 ■ N517BG



1532 TT, Cessna Demonstrator Until '15 - Delivered From Factory March '15, Power Advantage+, Aux Advantage, Parts Advantage, AFCS with Fully Integrated Auto Throttles, Dual Garmin XPDR GTX 3000 w/ADS-B Out Capability, Iridium Sat Phone w/Go-Go Wi-Fi. **CALL FOR PRICE +1 (561) 747-2223**

## 2018 Airbus Helicopters H130 T2

NEW



Delivery Date April '19, Dual Controls, VRF Day & Night Pkg w/ Integrated Flight Display Garmin G500H, Transponder (mode A/C/S) Garmin GTX 335R - ADS-B Out Capable, 2 Colors Scheme - Metallic Paint - Special Metallic Paint - (Customer Choice) ... **CALL FOR PRICE +1 (305) 301-5585**

## 2012 Cessna Citation CJ3

s/n 525B-0377 ■ N88GA



2220 TT, One US Owner, Engines on TAP Blue, Collins Pro Line 21 3-Tube Integrated Flight Information System with 6.0 Upgrade, ADS-B Out, Dual FMS w/WAAS, ATG-5000 Internet, 8 Passenger Executive Interior, On Cesscom Maintenance Tracking. ... **\$4,950,000 +1 (561) 747-2223**

## 2008 Learjet 40XR

s/n 6752 ■ N27AX



6752 TT, U.S. Pedigree Since New, ADS-B, UNS-1Ew (GPS/WAAS/LPV), Engines Enrolled on Honeywell MSP, Fresh A-D Inspection by Duncan Aviation, Operated Under FAA Part 135 Regulation, Forward Galley, 6 Seats + Belted Lavatory ..... **CALL FOR PRICE +1 (918) 831-3087**

## 2011 Sikorsky S-92A

s/n 920158 ■ G-CHHF



Available For Sale or Lease, Owner Financing Avail., Currently Configured for Offshore, Suitable for SAR and VIP Conversion, 2 GE CT7-8A Engines, Four Rockwell Collins 6in by 8in Portrait Multi-Function Displays, Maximum Take-Off Weight (kg): 12,564..... **Call For Price +44 1372 224488**

## 2001 Boeing BBJ

s/n 32774 ■ P4-SRN



4734 TT, Full Next Gen Capable, API Winglets, Internet & WiFi, All New Cabin Entertainment & Infotainment Sys, Brand New 26 Passenger Custom Designer Int. w/1 Year Warranty, Private State Room w/Ensuite Incl. Shower, Brand New Custom Designer Paint. **Call For Price +1 (954) 771-1795**

## 2008 Learjet 40XR

s/n 45-2101 ■ N725BH



\*3542 TT\*, Airframe on Smart Parts, CAMP, Operated on Part 135, Engines on MSP, Honeywell Primus 1000 IFCS, Dual UNS-1E's, Honeywell DU-870 4 Tube 8x7 EFIS, Flight Data Recorder, Extended Range Fuel Sys, 7 Passenger Configuration ..... **Call For Price +1 (561) 747-2223**

**YOUR BUSINESS AVIATION RESOURCE & MARKETPLACE.**

List your aircraft with Business Air: **515-574-2241 • www.businessair.com • www.aircraftforsale.com**

# Group effort

Several FBOs and airports join **Sky Valet's** Connect network, with more announcements to be made soon

**T**he Sky Valet group was launched in 2013 with two FBOs in the heart of the French Riviera (Cannes and St Tropez). Five years later, the company has become one of the top FBO networks in Europe, with more than 27 destinations in France, Spain and Portugal managing 50,000 business jets movements a year.

This success is based on a very simple fact: the European market wants stronger FBO consolidation to improve cost optimization, make operations easier and harmonize services for every business jet operator.

Sky Valet's strategy was initially based on external growth through acquisition, but major operators asked for further consolidation and faster network extension. In the meantime, independent airports and FBOs expressed their willingness to cooperate with Sky Valet. Sometimes you just need to listen to the market, and that is why Sky Valet launched Sky Valet Connect in 2018.

## European network

Sky Valet Connect goes hand in hand with Sky Valet's goal of becoming the leading business aviation ground handling network in Europe. This new brand provides direct added value to Sky Valet customers, who will benefit from a greater harmonized network of interconnected iconic business aviation destinations.

"Selection for entering the network is key, and we will only focus on established FBOs or airports with growing trends, first-class reputations and network compatibility," says Michel Tohane, Sky Valet director.

"What makes our proposal unique and very attractive is the fact that Sky Valet belongs to the Aéroports de la Côte d'Azur group, which manages two of the most iconic business aviation-only airports in Europe," he adds.

"Consequently, Sky Valet benefits from a complete understanding of running an airport and an FBO and can exchange best practices in both areas of business."

The first phase of Sky Valet Connect is mainly focused on commercial and marketing efforts, but members may also make use of Sky Valet's operational

experience, such as its 24/7 operational control center, or the company's operating software tool, my Handling.

Jerome Ferasin, CCO Sky Valet, comments, "Member FBOs can enjoy the benefits of being a Sky Valet Connect location while maintaining their own ownership, branding and operations.

"They benefit from the sales and marketing strategy developed by Sky Valet, generating better visibility and increased revenues. We were very excited and proud to welcome our first members so quickly after the launch of the label."

## Newest recruits

Indeed, Sky Valet Connect has already put down roots in three countries. The first is Italy, with Cuneo International Airport, a natural extension of the network's Mediterranean locations. Cuneo Airport is near Turin in the heart of Piedmont, welcomes any type of business jets up to BBJ and ACJ, and benefits from large aircraft parking areas and dedicated VIP facilities. During the last two years the airport has doubled the number of movements for business jets and the trend for 2019 is very positive.

The second country is Bulgaria, as Sky Valet continues its expansion toward Eastern Europe. Omega Aviation operates in three destinations – Sofia, the capital



Above: **Sky Valet has destinations in five countries**

Below: **Sky Valet Connect is active in three countries so far**

city; Burgas, the country's largest port and trendy Black Sea resort; and Gorna Oryahovitsa, the country's only privately owned international airport.

Avignon-Provence airport is the latest addition to Sky Valet Connect. Situated in the famous Provence area of France, the airport is open 24/7 and has a 120m<sup>2</sup> (1,290ft<sup>2</sup>) FBO facility dedicated to VIP and crew.

Sky Valet now covers 27 destinations positioned across France, Spain, Italy, Bulgaria and Portugal.

These first successes mark the start of an ambitious development program for Sky Valet Connect, which is expected to include several more destinations across Europe in the coming months.

"The interest from the market in this unique opportunity is very strong, and we can expect Skyvalet to add more FBOs by EBACE 2019 in May. If any FBOs reading this article are interested in this opportunity, we will more than happy to meet with them," concludes Ferasin. ○

## Vital statistics

**Locations:** France, Spain, Italy, Bulgaria and Portugal

**Founded:** 2013

**Services:** FBO, catering, ground handling, ground transportation, pilot and crew services, fueling

**SKY VALET**

To learn more about this advertiser, visit [www.ukimediaevents.com/info/bai](http://www.ukimediaevents.com/info/bai)

Reader Inquiry Number 105



# Welcome to Cyprus

The only FBO on the island of Cyprus, **Skylink Services** strives to offer the same level of excellence for all passengers, be it leisure travelers or heads of state

**S**ince beginning operations in Cyprus in 1998, Skylink Services has become the sole executive operations ground-handler at the island's Larnaca and Paphos airports, and offers a high standard of service to all its customers.

The company, which owns and operates Cyprus's only FBO, based at Larnaca Airport, offers a 24-hour service seven days a week, providing a stress-free experience to all crew and passengers arriving and departing Cyprus via the 17,200ft<sup>2</sup> (1,600m<sup>2</sup>) FBO. As well as an FBO, Skylink offers all services linked to the company at Paphos Airport.

Currently representing more than 400 companies worldwide that either own or operate executive aircraft, the company caters to aircraft ranging from very light jets to B747s and A340s.

## Head of State Lounge

Skylink Services manages and operates the Head of State Lounge on behalf of the Republic of Cyprus. The company holds sole responsibility for the management and operation of this facility, maintaining high standards and quality of service at all times.

The first visitor to the facility was His Holiness Pope Benedict XVI in 2010. From this historic visit onward, every head of state and dignitary visiting Cyprus has been handled via this prestigious lounge. During such high-profile events, Skylink Services ensures that the increased traffic created by visiting delegates and heads of state is handled seamlessly and efficiently. As part of the streamlined



Top: **The Head of State Lounge is built for ultimate comfort**

Above: **The company is the only FBO in Cyprus**

Left: **Skylink offers a 24-hour service at Larnaca Airport**

## Vital statistics

**Airports:** Larnaca and Paphos International Airports

**Founded:** 1998

**Services:** Aircraft handling, catering, customs and immigration, ramp transportation, car rental

process, passengers and crew using the lounge are always escorted through the terminal to provide convenience, safety and efficiency.

## Striving for perfection

Skylink is a member of the Air Elite Network of Diamond Service Locations. To qualify for membership, each FBO member has to meet a number of airport facility and service quality standards. At a recent network meeting, Skylink won second place in the international section of the 2018 Air Elite Network Diamond Service awards.

Skylink is also the only holder of IS-BAH Stage I accreditation on the island and is in the process of being audited to receive Stage II accreditation. The company has a very strict quality and safety policy and strives to offer the highest levels of service and quality. ○

## SKYLINK SERVICES

To learn more about this advertiser, visit [www.ukimediaevents.com/info/bai](http://www.ukimediaevents.com/info/bai)  
Reader Inquiry Number 106

# Superior service

**VINCI Airports Executive Handling** offers a new brand of quality in the business aviation sector

**V**INCI Airports, well known as a world leader in airports concessions, keeps growing and reinforcing its skills in the business aviation sector.

In 2018 in Europe, traffic results in the network were excellent with a 2% increase. These positive results are related to the good health of the market and attractive nature of VINCI's territories.

In France, Lyon, Toulon, Chambéry, Grenoble, Clermont-Ferrand, Rennes and Dinard airports handled about 24,000 aircraft movements in 2018 – 9% more than the previous year. Lyon Bron Airport alone registered a 36% increase in its flight movements.

These results are also linked to the loyalty and satisfaction of VINCI Airports' customers. The group launched the VINCI Airports Executive Handling label in 2018 to define standards and objectives for the quality of services and share its best practices within the network. It is



## Vital statistics

**Locations:** France, Portugal, UK, Sweden, Serbia, Cambodia, Japan, USA, Dominican Republic, Costa Rica, Chile and Brazil

**Founded:** 1996

**Services:** Develops, finances, builds and provides everyday operations at airports around the globe

## About VINCI Airports

VINCI Airports, a top-five global player in the international airport sector, manages the development and operations of 46 airports located in France, Portugal, the UK, Sweden, Serbia, Cambodia, Japan, the USA, Dominican Republic, Costa Rica, Chile and Brazil. Served by around 250 airlines, VINCI Airports' network handled 240 million passengers in 2018.

Through its expertise as a comprehensive integrator and the professionalism of its 14,500 employees, VINCI Airports develops, finances, builds and operates airports, leveraging its investment capability, international network and know-how to optimize the management and performance of existing airport infrastructure, facility extensions and new construction. In 2018, its annual revenue for managed activities amounted to €3.6bn (US\$4.04bn), for consolidated revenue of €1.6bn (US\$1.8bn).

Above: **Lyon Bron Airport's terminal** was refurbished in 2018

Below: **Customer satisfaction** is VINCI Airports' priority

based on four values: personalization, flexibility, confidentiality and safety.

"We would like to harmonize our standards and operational processes, to expand our expertise to all our network. Our experience as a global player in the international airports sector helps us have a large vision of our customers' needs. We started to implement this label in our five FBOs in the southeast region in France, but it is just the beginning," says Iryna Tissot, business aviation manager.

As a new challenge for 2019, VINCI Airports will launch its label at Lyon Saint-Exupéry Airport to ensure the best possible welcome to passengers and crews. This will be the first experience of such a deployment at an international airport.

VINCI Airports Executive Handling will be a strength for the company's network and will be a guarantee of a smooth and high-quality service for every customer. ○

## VINCI AIRPORTS

To learn more about this advertiser, visit [www.ukimediaevents.com/info/bai](http://www.ukimediaevents.com/info/bai)

Reader Inquiry Number 107





FROM THE PUBLISHER OF BUSINESS AIRPORT INTERNATIONAL MAGAZINE

INSIGHT ON  
CHANGE FROM  
**200+**  
SPEAKERS!

# *the* **FUTURE** *of* **T** **TRANSPORTATION** *World Conference*

**November 26, 27, 2019**

**VIENNA, AUSTRIA**

***CHANGING THE WAY PEOPLE THINK ABOUT  
TRANSPORTATION & URBAN MOBILITY!***

*Multiple streams, over 200 speakers,  
PLUS meet the companies shaping the future  
of transportation in our exhibitor zone!*



VISIT THE WEBSITE FOR MORE DETAILS AND TO **REGISTER!**

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

## Mototok's tugs offer benefits to airlines and business aviation operators alike

**E**fficiency is of great importance in airline operations. Every minute of delay in the logistics, handling or operating chain of the aircraft can accumulate to cause great disruption for the carrier, its passengers and airports. Therefore aircraft have been equipped with computer technology that can anticipate maintenance problems, track the progress of flights and intervene remotely.

Comparable hardware and software tools were introduced in 2015 on pushback tractors like the Mototok 8600, which is dedicated to single aisle liners. This technology is now available for more compact tugs for business aviation, such as the Mototok Twin line. An onboard computer can run software that will control the force applied to the front landing gear. A towbarless tractor can apply rotational or horizontal force without the operator noticing it. The multiple probes of the



Mototok strives to provide seamless pushback operations without error

machine measure the force on the three axes according to the speed and weight, thus making it possible to limit oversteering and the machine can correct the trajectory without external help.

Each value beyond operational limits is recorded in a logbook

that will make it possible to check incidents for each user, with the operator of the tug having been previously identified at startup by an RFID badge. The software capabilities can also be used for maintenance by informing the operator of important data

from the tractor systems, such as battery voltage. If necessary, the owner of the ground safety equipment can act on the settings from any portable device using wi-fi, Bluetooth, GSM or via a cable connection. The manufacturer of electric towbarless radio can intervene more deeply to modify the internal software or make fine adjustments remotely, without intervention on site.

Efficiency and regularity of operations are at the heart of these new technologies, which bring ever more professionalism and incomparable financial savings compared with previous generations of conventional tractors on the market. ○

**MOTOTOK**

To learn more about this advertiser, visit  
[www.ukimediaevents.com/info/bai](http://www.ukimediaevents.com/info/bai)

Reader Inquiry Number **108**

## Extensive customs and border protection services at Bangor International Airport

**I**t's business as usual for Customs and Border Protection at Bangor International Airport (BGR), Maine, where such services are available 24 hours a day – vital for an airport that is the first stop on the great circle route and the closest US port of entry to Europe.

Despite others charging for Customs and Border Protection services, BGR makes no such charge – one of many benefits the airport offers to general aviation traffic that contribute to its popularity among pilots and corporate users alike. Indeed,

customs is on site from 6:00am to 10:00pm. Outside these hours, inspection services can be provided by arrangement and for emergencies and diversions Customs and Border Protection is on call 24/7.

BGR is a world-class transatlantic facility and its strategic location makes it easy to get to. The airport also enjoys a reputation for speedy turns, for both aircraft and passengers. "We know that the adage 'time is money' is particularly true in the business aviation community and we have developed a suite of world-class, highly competitive ground handling services to meet that need," says airport director Tony Caruso.

Bangor provides one of the most skilled and efficient ground service teams worldwide – from 24/7 tower operations and

dispatch services to refueling, aircraft servicing, Federal inspection, passenger services and other transit needs.

With a CAT III, 11,440ft (3,486m) runway, BGR can accommodate the largest aircraft in the world and is also able to handle CAT II operations with ease.

"With extensive experience with all kinds of aircraft, from the smallest of private jets to the giant Antonov, an excellent weather record, no navigation fees, ample ramp space and very reasonable parking fees, it's no wonder that flying BGR is easy and affordable," says Caruso. ○

**BANGOR INTERNATIONAL  
AIRPORT**

To learn more about this advertiser, visit  
[www.ukimediaevents.com/info/bai](http://www.ukimediaevents.com/info/bai)

Reader Inquiry Number **109**



The Bangor facility serves the East Coast of the USA. Photo: Tony DelMonaco



## An overview of five years of operations at Cat Air Service

**O**perating out of Zurich Airport's General Aviation Center (GAC), Cat Air Service was founded in 2014 by Air Service Basel and Cat Aviation, when both companies saw an opportunity to offer a new, customer-focused experience out of Switzerland's Zurich Airport.

In November 2014 the company opened for business and was led by Robert Whitehead. Whitehead's long-standing experience in the FBO business was what was needed to raise the standard in executive ground handling services at Zurich Airport. The company focused

on its passengers and crews by giving them access to the only airside lounge at the GAC, as well as personalized concierge and catering options.

In January 2015, Cat Air Service satisfied its new clients by supporting traffic for the World Economic Forum (WEF) in Davos. The crew members took advantage of the airside lounge facilities to reduce the number of security screenings.

Roger Büchner was assigned new general manager in mid-2017 and the company was soon awarded with its first stage accreditation from the International Standard for Business Aircraft Handling (IS-BAH).

In 2018, CAS provided private apron parking for aircraft during the WEF. The end of the year results showed that the company held a 13% market share at Zurich Kloten Airport. This year, Cat Air Service secured extra parking

hangar spaces at the airport to support clients during WEF 2019 and the staff have begun working towards gaining the important IS-BAH Stage 2 certification.

From the first day of operations in 2014, the team were committed to ensuring its customers grasped the quality and customer care the company had to offer. Cat Air Service pays attention to details and the well-being of its clients and understands that each passenger and crew member has different preferences and requirements.

"We are extremely happy about the past five years, and when we see we have built a solid business, that speaks for itself. It is an accomplishment that all the Cat Air Service team can be proud of," comments Büchner. ○

### CAT AIR SERVICE

To learn more about this advertiser, visit [www.ukimediaevents.com/info/bai](http://www.ukimediaevents.com/info/bai)

Reader Inquiry Number **110**



Cat Air Service prides itself on its customer offering in Switzerland

## DC Aviation recommends Malta International Airport for time-constrained missions

**W**hen planning a long-range flight, OCC and flight operations departments must consider a lot of things, including the range of the aircraft and whether the flight occurs during the window of circadian low (WOCL). Will extended crews be required or perhaps even a crew change? Planning such a flight is complex and requires knowledge, training and experience.

In a world of ever shrinking margins, with higher demands for increased productivity and reduced costs, one must think outside the box when it comes to flight planning. How about looking at alternative fuel stops – is there something else out there that fits the purpose and gives that little extra that would guarantee a better margin, a happier passenger, a more efficient crew change, 24-hour operations including technical



DC Aviation offers tax-free fuel in Malta for international operators

support if required, tax free fuel and clement weather?

How about Malta International Airport? Situated in the middle of the Mediterranean, it is geographically well placed for long-range flights east to west, north to south or vice versa. Long runways and in excess of 300 days

of sunshine guarantee no weather issues, no snow or de-icing and no slot concerns. There are also plenty of commercial flights and hotels available all year round.

English is one of the official languages of Malta and over the past decade it has become a jurisdiction within the EU and the

Eurozone, which is synonymous with business aviation. A 24-hour airport and the possibility of fuelling with passengers on board makes a 30-minute turnaround the norm rather than the exception. When flight crew duty times are limited and the customer has a tight deadline, it is always great when one finds an airport that works with you rather than being another challenge. When the finance department demands better margins, a business aviation friendly airport such as Malta, with tax-free fuel for all international operations, might be what the flight operations department needs to get that edge over the competition. ○

### DC AVIATION

To learn more about this advertiser, visit [www.ukimediaevents.com/info/bai](http://www.ukimediaevents.com/info/bai)

Reader Inquiry Number **111**

# Business Airport

I N T E R N A T I O N A L



Join our LinkedIn group page at  
[www.BusinessAirportInternational.com](http://www.BusinessAirportInternational.com)

**8,631**

READERS FROM **121**  
COUNTRIES WORLDWIDE \*

\* ABC audited circulation, average net figure Jan-Dec 2018

**EBACE**

21-23 MAY 2019 | GENEVA

The *Business Airport International* team will be at EBACE in Geneva from May 21-23, 2019

**Come and meet the team on Booth J95**

*Business Airport International* will be distributed at the event.

**On the web**

For exclusive interviews and industry opinions, visit  
[www.BusinessAirportInternational.com](http://www.BusinessAirportInternational.com)

**LATEST SUBSCRIBERS**

**Professionals from:**

- *Rotana Jet Aviation, United Arab Emirates*
- *Melbourne Jet Base, Australia*
- *Naples Airport Authority, USA*
- *Anotec Engineering, Spain*
- *Air Partners Corporation, Canada*

**In the next issue**

- **Regional focus:** Everything you need to know about flying to Italy
- **City focus:** Heading to Moscow
- **Fuel:** What is the best type of alternative fuel for jets?
- Plus the latest news and views from industry experts

**Contact our sales team to be involved!**

Jag Kambo, publication manager:  
[jag.kambo@ukimediaevents.com](mailto:jag.kambo@ukimediaevents.com)  
Web: [www.BusinessAirportInternational.com](http://www.BusinessAirportInternational.com)

**Subscribe at [www.ukimediaevents.com/bai](http://www.ukimediaevents.com/bai)**

## Index to advertisers

Air Service Basel GmbH.....	Inside Back Cover	DC Aviation Limited Malta.....	65	Sky Valet .....	11
Avfuel Corporation .....	47	Harrods Aviation .....	38	Skylink Services Ltd .....	9
Bangor International Airport.....	65	IAM Jet Centre .....	Inside Front Cover	SPACE .....	31
Business Air .....	75	InterAviation Japan.....	25	TAG Farnborough Airport .....	34
Business Airport International Online Reader Inquiry Service.....	83	London City Airport .....	36	The Future of Transportation World Conference 2019.....	79
Castle & Cooke Aviation .....	7	Manny Aviation Services .....	50	VINCI Airports.....	19
Cat Air Service AG .....	52	Mediterranean Aviation Co. Ltd.....	Outside Back Cover	XJET .....	41
Collins Aerospace .....	3	Milano Prime.....	16	XLR Executive Jet Centres.....	55
DC Aviation Al-Futtaim LLC .....	13	Mototok International GmbH.....	52		
		NBAA.....	70		



# Learn more about our advertisers **NOW!**



FREE SERVICE!

Visit **[www.ukimediaevents.com/info/bai](http://www.ukimediaevents.com/info/bai)**  
to request exclusive and rapid information  
about the latest technologies and  
services featured in this issue

[www.ukimediaevents.com/info/bai](http://www.ukimediaevents.com/info/bai)

**Business Airport**  
INTERNATIONAL

## DOES **CORSIA** GO FAR ENOUGH?

**T**he Council of the International Civil Aviation Organization (ICAO) has taken another important step toward implementing the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) in 2020.

ICAO's Technical Advisory Body (TAB) – a group of experts nominated by States with a mandate to make recommendations to the council – has been put into operation to oversee the eligible emissions units for use by airlines in CORSIA.

The Council also approved the Emissions Units Criteria (EUC), which would be used by



TAB to undertake the assessment of emissions unit programs and subsequently make recommendations on eligible units. The Council further approved the Terms of Reference (TOR) for TAB, including its mandate, tasks and working methods. Based on the TOR, TAB will initiate work by defining its work program and timeline.

While CORSIA has good intentions for the environment, many observers are unsure whether it is doing enough to combat the impact of emissions. *Business Airport International* went to social media to find out what those in the aviation industry think about CORSIA and the new updates. ○

### Your views

The headline goal of CORSIA – carbon neutral growth from 2020 – is not remotely consistent with the goals of the Paris Agreement. Any consistent plan would feature absolute emissions reductions.  
**@a\_free\_ride**

CORSIA would be more impressive if it covered all international flights; offset criteria were strong; deliberations were transparent; it reported actual within-sector (not just 'net') emissions; and it sought to reduce (not just flatten) emissions.  
**@flyingless**

Important steps taken again in Montréal. I'm not sure everyone sees the importance of this process, but once we have the full CORSIA system in place, it will be a sector-specific measure to curb emissions from a global industry.  
**@flygfredrik**

If airlines are going to be offsetting to meet CORSIA, perhaps offsetting through your airline is just paying them to do something they'll do anyway. Maybe the right answer is to offset through a third party so that the airline doesn't offset your offset.  
**@jamesvasile**

What is critical to ensuring CORSIA delivers real impact is environmental integrity. You can't have that without strong rules that ban credits that are already 'baked into' the scientific estimates.  
**@felipe\_deleon**

From 2020, aviation may become the biggest purchaser of offsets, done through the CORSIA reduction scheme. Will this reduce emissions? No – 82% of projects will happen without credits, 13% at some risk without credits, and 4% are dependent on credits.  
**@Peters\_Glen**



### Your comments

**What do you think?**  
Does CORSIA go far enough to mitigate emissions? What else could be implemented into CORSIA to extend its reach? We'd love to hear your thoughts on this or any other topic affecting the business aviation industry, so visit [www.linkedin.com](http://www.linkedin.com) and search *Business Airport International* to join in with the debate.

**LinkedIn**

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





THE ONLY  
BUSINESS  
AVIATION  
FACILITY YOU  
NEED



VIP Handling

Parking

Maintenance

CAMO

**Air Service Basel | FBO, Parking, Maintenance,  
CAMO in Basel**

Air Service Basel is your premier Fixed Based Operator (FBO) and Maintenance Centre for Business Aviation, Private Jets and Helicopters in Switzerland.

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





**MEDAVIA**

MEDITERRANEAN AVIATION  
COMPANY LIMITED

# Coming to Malta?

**Let us organise and take care of all your Ground Handling requirements.**

Flight Support, airport transfers, fuel, hotac booking, permits and catering;  
we've got you covered.

