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CHALLENGING THE FUTURE

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The Avfuel Network:
Fuel is just the beginning

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Find out more at avfuel.com
UPFRONT

THE DAYS ARE SHORTER, the temperatures lower and even in Texas the snow is starting to fall. Hard as it may be to believe, we’re already at the end of another year. But unlike my other end-of-year reflections, this one is special. You see, not only is this the last issue of BART International for the year, it’s also the last issue of our ‘20s’. That’s right, BART is turning 30.

Needless to say, a lot has changed since BART Issue 1 – both in terms of the magazine and the industry. When I first launched BART three decades ago, there were no other Business Aviation magazines published in Europe. Now of course the publication bins at EBACE are overflowing with magazines claiming to represent the industry. Although there are many fine publications out there, far too many pay far too much attention to the so-called ‘lifestyle’ of private aviation. Not BART!

Standing for Business Aviation Real Tool, BART’s focus has always been on the transatlantic business part of Business Aviation. Don’t expect to see a bottle of bubbly in our pages, just pictures of people busy working on their computers and smartphones. (Ok, maybe not computers and smartphones in the early editions of BART, way back when we did work the old-fashioned way – with pen and paper!) Regardless of how you work, Business Aviation helps you work better. With our industry constantly under attack for being a luxury good, we simply cannot afford to portray Business Aviation as anything other than an engine for economic growth. So let’s save the champagne for EBACE after parties.

Speaking of pen and paper, I’m proud that BART remains first and foremost a printed publication. Even as the world goes digital, I truly believe there is still space for print – a space that includes FBO lounges, conference tables and tradeshow floors. But this doesn’t mean that BART is 100% analog. In fact, we launched our first website nearly 20 years ago. Since then, we’ve added social media, so now you can follow us on Facebook, Twitter, LinkedIn and Instagram. As we move into year 30, we just launched a new site that complement our magazine, providing you, the reader with even more of the news, insight and quality writing that you’ve come to expect from BART. And who knows, maybe for our 40th anniversary we’ll be announcing the launch of BART in Virtual Reality!

But it’s not only BART that’s changed, the industry has too. When I started BART in 1988 there were 1,596 business aircraft in Europe. Last year, that number was 3,880 – second only to the North American fleet. With the economy picking up in North America and on the Continent, fleet sizes will only go up. But to know for sure, you’ll have to wait until next issue and our annual Fleet Report. And while you wait, let me take the opportunity to say Happy Birthday to BART and Happy Holidays to you! Until next year –

“*For it is in giving that we receive.*”

*St Francis of Assisi*
New Master-Level Courses Increase Safety And Proficiency

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FlightSafety proudly offers a new series of advanced pilot courses designed to enable flight crews to respond to challenging situations and achieve the highest level of safety. Enhance your skills with master-level, aircraft-specific training in a controlled learning environment. Our progressive curriculum expands aviation education beyond the fundamentals covered by initial and recurrent training. Compelling scenarios, coupled with breakthroughs in simulator technology, deliver deeper knowledge of the aircraft and help ensure a safe and correct response to demanding flight situations. Trust us to deliver the highest level of professional aviation training available.

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HANGARS ARCHITECTURE
TAG Farnborough Airport. A Business Aviation oasis with main terminal and a control tower. A place to appreciate the crew & aircraft services, the handling & airport information.
POINTER

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Long Beach CA, USA

HAI HELI-EXPO
Feb 26 - Mar 1, 2018
Las Vegas, USA

AERO Friedrichshafen
Apr 18 - 21, 2018
Friedrichshafen, Germany

EBACE
May 29 - 31, 2018
Geneva, Switzerland

FARNBOROUGH International
July 16 - 22, 2018
Farnborough, UK

IN SEQUENCE

BRIEFING ROOM

EUROPEAN REGION
FLIGHT PLANNING TIPS

Network Manager (NM), or Network Management Operations Centre (NMOC) – previously known as the Central Flow Management Unit (CFMU)– is the operational unit of Eurocontrol and responsible for airspace management in Europe from the north edge of Africa, including Morocco, west to Ireland, north to Finland and as far east as Azerbaijan. While flight planning procedures in Europe are generally straight-forward, it’s always best to review flight planning requirements with your 3rd-party provider prior to operations into NM airspace.

KEY FLIGHT PLANNING TIPS

It is recommended to include the Runway Visual Range (RVR) [in meters] capabilities on your flight plan. Landing RVR information may be used for flow management during low visibility conditions to regulate the traffic flow to those aerodromes. Be aware that some city pairs have capping levels. You may be planning to fly “high and fast” only to find out that a particular city pair has a capping level that keeps you down, at slower speeds, and higher fuel burns. When planning a height monitoring unit (HMU) check, be aware that you don’t have to fly right over the top of a HMU for an accepted measurement.

MANDATED EQUIPMENT REQUIREMENTS

The entire area covered by NM requires you to have VHF 8.33 KHz radio spacing. If you do not have this capability operations will be restricted to below FL195. By January 1, 2018, Eurocontrol aims for full deployment in all European airspace without exception, while some countries like Germany have already implemented 8.33 spacing lower than flight level (FL) 195. Some states/regions – including Belgium, Czech Republic, France, Germany, the London terminal area and Netherlands – require transponders to be Mode S with enhanced surveillance (EHS) capability. As of September 2014, the requirement for EHS and automatic dependent surveillance-broadcast (ADS-B) has been delayed. Aircraft with a certificate of airworthiness issued after June 8, 2016, is now required to be equipped with both EHS and ADS-B. On June 7, 2020, all aircraft exceeding 5,700 kg or having a max cruising true airspeed capable of 250 knots (TAS) or greater will be required to have ADS-B and EHS. The Controller-pilot data link communications (CPDLC) requirement over European skies was also delayed until February of 2020.

EQUIPMENT EXEMPTIONS

There are specific exemptions to equipment for state and military flights, and for all other flights inquiries can be made to each individual state the flight will be operating in.

RANDOM ROUTES

As of July 2017, there has been Free Route Airspace (FRA) implemented across all portions of the European skies. There are now large portions of airspace that no longer have any route structure and are solely Free Route. Even those countries who have maintained an ATS route structure allow direct routes between designated waypoints. Outside of the FRA, operators must stick to routes that are approved based on definitions found in the Route Availability Document (RAD).

PERMIT EXEMPTIONS

Permits are not required for most private non-revenue flights within Europe, unless it is an experimental flight.

SPECIAL ATC PROCEDURES

All ATC procedures in Europe are based on the RAD. Should ATC determine that they need to delay your flight you’ll be issued with an airway slot.

PRE-VALIDATION REQUIREMENTS

All flight plans may be checked for validation on NM’s website. Assuming your 3rd-party provider is set up appropriately with NM they’ll receive various update messages identifying the status of your flight.

PROCESSING CONSTRAINTS

It’s important to remember that departures from any country that’s part of Eurocontrol’s DFMU IFPS Zone (IFPZ) be filed with NM and not with local ATC.

CONCLUSION

In order to take advantage of most efficient routings within European and Eurocontrol airspace onboard equipment must meet current mandated requirements. As these airborne equipment requirements are continually evolving it’s important to be aware of both current and future regulatory requirements within this busy/ popular operating environment. If you have any questions about this article or would like assistance flight planning in Europe, contact: adamdowley@univ-wea.com or jason-davidson@univ-wea.com

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TAG FARNBOROUGH AIRPORT TO PROVIDE AJC LINE MAINTENANCE SUPPORT

TAG Aviation’s Farnborough Maintenance Services Centre (TFMS) now offers Line Maintenance support services for its Airbus A320 Corporate Jet series customers who use TAG Farnborough Airport. A healthy increase in movements of the Airbus Corporate Jet series (ACJ) using TAG Farnborough – the only London gateway airport dedicated exclusively to Business Aviation – has been witnessed in recent years, reaffirming the Airport’s success to attract more wide-body aircraft types. TFMS will be able to provide customers with onsite support, ranging from daily and weekly checks, to undertaking ad hoc troubleshooting.

THREE C INSPECTIONS ON FALCON 7XS FOR AERO-DIENST

Aero-Dienst Nuremberg has completed the first of three Dassault Falcon 7X C inspections. Intensive planning and thorough performance of the first two consecutive C inspections guarantee the experienced Falcon operator and long-term customer Shell a high degree of fleet availability. Aero-Dienst used the downtime to carry out several tasks in parallel: “In addition to classic cabin and cockpit overhauls, we installed a quick access recorder (QAR) based on a new STC”, says Thomas Opelt, Aero-Dienst’s Maintenance Avionics Manager.

UAS WINS EXCLUSIVE CHARTER MANAGEMENT OF DEER JET’S DREAM JET WORLDWIDE

Leading global Business Aviation group Deer Jet has granted its strategic partner UAS International Trip Support (UAS) the exclusive global charter management of the “Dream Jet”, the world’s only BBJ 787 in VVIP configuration. The Dream Jet has attracted international attention throughout its “Dreams Encounter the World” tour which saw the one-of-a-kind aircraft welcome UHNW individuals and royal family members for exclusive viewings in several places globally, including Paris, Marrakech, Seattle, Doha, Dublin, London, Shanghai, Hong Kong, and most recently, Jeddah.
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**SETOUCHI HOLDINGS SIGNS AGREEMENT FOR SEAPLANE OPERATION**

Quest Aircraft Company has announced a new joint venture agreement between Quest parent company Setouchi Holdings, Inc and the Maldives-based company Island Aviation Services Ltd. The agreement establishes a new seaplane operation, Sky Atoll Private Ltd, and an initial order of four Kodiak 100s has been placed to kick start the new program. Made up of roughly 1,200 coral islands, the Republic of Maldives is world renowned for its “one island, one resort” ultra-luxury resorts, and each year continues to draw a growing number of tourists from around the world.

**TEXTRON AVIATION DELIVERS 10 CESSNA GRAND CARAVAN EX TURBOPROPS TO BOTSWANA**

Textron Aviation Inc., has begun delivery to Tuareg Aviation Ltd for 10 Cessna Grand Caravan EX turboprops. The aircraft will be operated by Mack Air (Pty) Ltd to provide charter, cargo and logistic services between a network of independently owned bush safari lodges in the popular Okavango Delta and Kalahari Plains regions of Botswana. The aircraft will partially replace Mack Air’s current fleet, which currently also includes Grand Caravan turboprops. “The Caravan platform continues to prove its incredible performance and reliability in challenging environments,” said Lannie O’Bannion, vice president of sales, Africa.

**BELL HELICOPTER INCREASES SUPPORT IN UAE**

Bell Helicopter, a Textron Inc. company, has appointed Abu Dhabi Aviation as an authorized Bell Helicopter Customer Service Facility (CSF) for Bell 412s and Bell 212s to support continued customer growth in the Middle East. “The Middle East is an extremely important market for Bell Helicopter. As our operator network grows it is important we provide our customers with smart and simple service solutions to accommodate the expanding region,” said Glenn Isbell, executive vice president, Customer Support and Services.

**AIR BP FUELS FIRST EMIRATES FLIGHT TRAINING ACADEMY AIRCRAFT**

One of Air BP’s latest customers in the region is the Emirates Airline Flight Training Academy. Air BP has won a contract to supply the Emirates Airline Flight Training Academy with Avgas and fuelled the first two Cirrus SR22 G6 training aircraft late October. The company has also recently started supplying fuel to Dubai-based Emirates Airline at São Paulo Guarulhos International and Viracopos Campinas International airports in Brazil. This is in addition to the existing operation at Rio de Janeiro International.
Pilots and passengers will appreciate the affordable, global inflight connectivity provided by AeroWave™ from BendixKing.

Crews will now have inflight access to the internet and their favorite apps. Passengers will enjoy the ability to send and receive emails or text messages, check the weather, make phone calls and more. AeroWave’s low-cost connectivity service plan is based on prepaid hours of use and has nothing to do with data usage. Airtime is only $40 USD per hour, and it works at any altitude. It’s that simple.

Don’t leave your favorite apps behind. Find out how to get globally connected today.
**P&WC SIGNS FMP CONTRACT WITH ABU DHABI AVIATION**

Pratt & Whitney Canada (P&WC) has signed a 20-year Fleet Management Program (FMP) contract with Abu Dhabi Aviation (ADA) for 22 PT6C-67C engines that will power the airline’s fleet of Leonardo AW139 helicopters which primarily serve the offshore oil and gas industry in Abu Dhabi, Saudi Arabia, Dubai and India. The FMP will also include the installation of P&WC’s FAST Solution for advanced prognostics and engine health management. P&WC is a subsidiary of United Technologies Corp.

**GOGO BUSINESS AVIATION BECOMES JETSUPPORT’S NEW DEALER**

JetSupport has been authorized as a full-service maintenance, repair and overhaul Gogo Business Aviation dealer and will participate as a partner for hardware sales and installations across Gogo’s product portfolio on business aircraft. The authorization as a Gogo dealer is in line with JetSupport Avionic’s division strategy to extend the service level capability with OEM dealership approvals. Becoming an authorized Gogo dealer is an important milestone for JetSupport due to the extensive scope of products and broad market it serves.

**BOMBARDIER DOUBLES CAPACITY AT LONDON BIGGIN HILL SERVICE CENTRE**

Bombardier Business Aircraft’s service center at London Biggin Hill Airport has doubled its capacity with the addition of a new hangar and more than 70 technicians, providing customers in the region with extended maintenance support. The new facility will grow to a total of approximately 115 employees by mid-2018. With the high demand for OEM services in Europe, the additional hangar will be dedicated to heavy maintenance events, including 96-month and 120-month inspections. Following the expansion, Bombardier’s London Biggin Hill Airport facility will be able to service twice as many aircraft.

**LUFTHANSA TECHNIK COMPONENT SERVICES EXPANDS WORKSHOP IN TULSA**

Lufthansa Technik Component Services (LTCS) has substantially expanded its workshop in Tulsa, Oklahoma. The Lufthansa Technik subsidiary officially started operation of the new component shop. Providing a shop floor area of 10,700 square meters (115,000 square feet), the facility has doubled in size. Additional capabilities and an enhanced logistics network in the region furthermore increase the performance and service portfolio of the company. For Lufthansa Technik the portfolio expansion is a major increase of its footprint in the Americas.
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On 7 December 2017 Pilatus obtained type certificates from the European Aviation Safety Agency (EASA) and the US-American Federal Aviation Administration (FAA) for the first ever Swiss business jet. Certification of the Super Versatile Jet prepares the ground for initial customer deliveries, which will see the PC-24 business jet take off from Central Switzerland for its entry on the global market.

In any project to develop a new aircraft, certification by the aviation authorities is by far the most important milestone, given that it means deliveries to customers may go ahead, generating revenue for the manufacturer. The PC-24 development project was officially announced in 2013, but work on the Super Versatile Jet has in fact been in progress for the past eleven and a half years. The first PC-24 prototype completed its maiden flight in May 2015. All three prototypes used in the certification program have flown a total of 2205 hours worldwide so far. Some flight tests were conducted in extreme environments. Pilatus test pilots took the aircraft to the very boundaries of its limits and even beyond, flying it in configurations and maneuvers forbidden to the commercial pilots who will subsequently occupy the cockpit. Oscar J. Schwenk, Chairman at Pilatus, had this to say on receipt of the type certificate: “The PC-24 is the first ever Pilatus business jet. Naturally, the requirements associated with obtaining certification for this sort of aircraft are extremely rigorous, and I need hardly mention that we faced some big challenges. In 2013 we announced that the PC-24 would be ready in 2017, and now, shortly before the end of the year, we have achieved exactly that.

Major investments in Switzerland and USA Pilatus invested over 500 million Swiss francs of own funds in the PC-24 development program. A further 150 million francs went into buildings and state-of-the-art production machinery at Stans in order to expand our PC-24 series production capacity in parallel.

In the USA – one of the most important markets for the company – Pilatus invests in a new completions and support center. The interior design will be discussed with the PC-24 customers on site before implementation.

Schwenk comments further on achieving the milestone of certification: “I’m extremely proud of my workforce, and would like to thank Pilatus owners, the two aviation authorities and our first 84 PC-24 customers for their trust and confidence in myself and my team. This project involved considerable risk, but we always believed 100 percent in our PC-24 and were prepared to go all the way to the limits of what we can reasonably do to ensure its success. Obtaining certification is our reward for so many years of untiring effort.”

ExecuJet, part of the Luxaviation Group, announced that its Dubai FBOs, located at Dubai International Airport (DXB) and Al Maktoum International Airport (DWC), have gained the International Standard for Business Aircraft Handling (IS-BAH) Stage I accreditation. Ettore Poggi, Group FBO director, Luxaviation Group, said: “It makes me very proud that our Dubai FBOs have been recognized by the International Business Aviation Council (IBAC) and awarded the IS-BAH accreditation. The accolade demonstrates ExecuJet’s unwavering commitment to service excellence across all aspects of the business.”

CAE and Abu Dhabi Aviation Training Center (ADATC) announced the launch of the new Embraer ERJ145 pilot training program with Falcon Aviation. Together, CAE and ADA will be delivering training to Falcon Aviation’s pilots and other regional operators at ADA’s brand-new training facility in Abu Dhabi, United Arab Emirates, starting in the first half of 2018. As part of the program, pilots will be training on the new CAE 7000XR Series full-flight simulator (FFS), equipped with CAE Tropos-6000XR innovative visual systems. “We are delighted that our pilots will receive a world-class training experience, synonymous to our values and promise to our customers,” said Capt. Ramandeep Oberoi, chief operating officer of Falcon Aviation.
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CorporateCare delivers comprehensive worldwide support adding value and liquidity to your aircraft - so relax, Rolls-Royce has you covered. For more information, email corporate.care@rolls-royce.com.

Trusted to deliver excellence.
Jet Aviation continues to grow its global fleet, adding six new aircraft for management in the Middle East in 2017. The company currently manages 22 aircraft in the region. Jet Aviation continues to see steady demand for its aircraft management and charter services in the Middle East. The company has added six aircraft to its fleet, including a Bombardier Global, two Falcon aircraft, two Gulfstream G650s and a Learjet. These aircraft are based in North Africa, Saudi Arabia and the United Arab Emirates.

Honeywell has selected ExecuJet Nigeria as an approved avionics dealer and installation and service facility for business aircraft owners in the Africa region. As the African business and general aviation market continues to expand, this arrangement enhances an owner or operator’s ease to modernize, upgrade and overhaul aircraft cockpits locally. With the ability to support West and North Africa more easily, local owners can now save time and expenses without the need to fly to Europe or South Africa for overhauls, upgrades or repairs. ExecuJet’s proximity to other regions provides business aircraft owners in West and North Africa use of its Lagos, Nigeria facility as a service point for their aircraft.

The International Business Aviation Council (IBAC), announced that the African Business Aviation Association (AfBAA) is now a member of the Council. The 15 member associations from around the world represent a coordinated voice for Business Aviation and the international standards, policies, and best safety practices that are at the core of IBAC’s mission. “We are excited to have the AfBAA join IBAC,” stated Kurt Edwards, Director General of the International Business Aviation Council. “Our goal is to serve the diverse needs of Business Aviation around the globe, and this expanded representation from Africa is a significant achievement,” added Edwards.

StandardAero Business Aviation has launched a new internet-based customer service portal, called myStandardAero.com, which will serve as a project management tool to allow customers to review and approve MRO service projects and programs real-time, on-line. The new system provides a user friendly interface that can be accessed on any browser-based and/or mobile devices. Through myStandardAero.com, customers will be able to review and approve squawks, communicate directly with specific StandardAero project managers and review work orders from anywhere they can access the internet. “While some MRO providers offer similar capabilities,” said Marc McGowan, president of StandardAero Business Aviation, “StandardAero’s system is based on a communities-capable platform, providing users with a friendlier interface that will also allow us to rapidly expand functionality for developing new services.”
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Jet Aviation, together with its joint venture partner the Al Mulla Business Group, celebrated the opening of its new FBO facility in the shared terminal at Dubai South during the 2017 Dubai Airshow. “We are firmly committed to our customers in Dubai and the region, which our new Dubai South FBO demonstrates,” said Hardy Butschi, vice president and general manager of Jet Aviation’s MRO and FBO operations in Dubai. As Business Aviation traffic is increasingly channeled through DWC, the upscale 600-square meter FBO in the shared VIP terminal adds considerable capacity for Jet Aviation to meet customer requirements now and into the future. The new state-of-the-art facility features three customer lounges, a conference room, crew lounge and operations center, two prayer rooms and shower facilities.

FlightSafety International announced that the United States Federal Aviation Administration presented the Wright Brothers Master Pilot Award to 10 FlightSafety Instructors during November. “We are proud that at least 70 FlightSafety Instructors have earned this prestigious recognition to date. Congratulations to all on behalf of our Teammates and Customers,” said Bruce Whitman, chairman, president & CEO. Jeff Terrell received the Wright Brothers Master Pilot Award on November 20th at the Wichita Cessna Learning Center. Homer Bentley, Larry Gilbert, George Greene, Roff Sasser and Ron Walters from the Savannah Learning Center were presented the award yesterday at the Dallas/Fort Worth North Center.

NBAA President and CEO Ed Bolen recently stopped by the Arizona Business Aviation Association (AZBAA) to discuss the association’s efforts to oppose the privatization of the nation’s ATC system. BART International joined him at the meet and greet, which was part of Bolen’s tour of Arizona, where he met with members of the state’s Business Aviation community to discuss the need for everyone in the industry to remain engaged. According Bolen, the proposal to privatize ATC is nothing but an airline power grab that would have disastrous consequences for smaller communities not served by the airlines - including those in the Grand Canyon state. "The bill would place control of ATC squarely in the hands of 13 unelected, unaccountable individuals, and threatens the future vitality of general aviation airports,” he said. "Instead of providing targeted solutions to identified modernization needs, H.R. 2997 will likely slow down the implementation of NexGen and add $100 billion to the national deficit."

Bolen finished his remarks by thanking AZBAA for its leadership in opposing the bill, while emphasizing the need to keep up the pressure. "AZBAA has always answered the call when support is needed, and right now we need you to contact your elected officials about this important issue," he concluded.

FlightSafety Instructors Receive Wright Brothers Master Pilot Award

Quick Lane

Bolen Talks H.R. 2997 in Arizona

Jet Aviation Celebrates Opening of New FBO in Dubai South

FlightSafety Instructors Receive Wright Brothers Master Pilot Award
LIMITLESS

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Visionary or timeless, bold or subtle; the world’s most exclusive members’ club or a sanctuary from the world below: each Jet Aviation Completions interior is a finely hand-crafted representation of an individual idea.

Full-height showers, interactive table tops, flexible open plan spaces and innovative seating or lighting solutions, beautifully complemented by fine fabrics, richly-toned wood veneers and bespoke detail. All expertly integrated into an airworthy interior.
MTU Maintenance Canada has introduced V2500-A5 maintenance, repair and overhaul capabilities and is fully certified by the Transport Canada Civil Aviation Authority. The introduction of the engine line that serves the world’s A320 fleet is the result of an agreement between Pratt & Whitney, IAE and MTU Aero Engines. It enables MTU Maintenance Canada to serve the IAE aftermarket network for the life of the V2500 program. The first engine is already at the facility for overhaul.

“With our depth of expertise and proven success in new product development, we were eager to work directly with a world-class company like FedEx Express to jointly develop the Cessna SkyCourier,” said Scott Ernest, president and CEO of Textron Aviation.

SmartSky has conducted multiple demonstration flights for current and prospective customers. The most recent were at the National Business Aviation Association’s Business Aviation Convention and Exhibition (NBAA-BACE) in Las Vegas. During the flight, the media was encouraged to do multiple things online simultaneously. They conducted real-time video calls with colleagues across the country. They seamlessly streamed movies (no buffering), and used their phones to do everything from check their calendars to search the web. They easily accessed corporate clouds, and successfully sent and received data on multiple VPN sessions.

FlightSafety International has announced a new Pratt & Whitney Canada PT6A Series Pilot Familiarization Course designed specifically for Agricultural Aircraft operators. Training is planned to begin in Brazil early 2018. Additional locations will be added according to customer needs. “This new course will provide agricultural pilots who fly aircraft equipped with Pratt & Whitney Canada PT6A series engines with the information and hands-on practical training needed to help operate and maintain the engines to the highest standards,” said Steve Gross, senior vice president, Commercial.

MTU Maintenance Canada has introduced V2500-A5 maintenance, repair and overhaul capabilities and is fully certified by the Transport Canada Civil Aviation Authority. The introduction of the engine line that serves the world’s A320 fleet is the result of an agreement between Pratt & Whitney, IAE and MTU Aero Engines. It enables MTU Maintenance Canada to serve the IAE aftermarket network for the life of the V2500 program. The first engine is already at the facility for overhaul.

“The V2500 engine’s success is a testament to the reliable performance and value it has delivered to its customers for almost three decades,” said Joe Sylvestro, vice president, Aftermarket Operations, Pratt & Whitney.
“Knowing more has helped us become the world leader in advanced winglet technology, so we rely on JETNET’s world-leading information for market research and prospecting.”

“We provide outstanding products and build trusting business relationships with clients, and JETNET does the same for us. Their team always comes through—they’re indispensable.”

GARY DUNN  
Client since 1996  
Vice President of Sales & Marketing, Aviation Partners, Inc.
Jet Support Services, Inc. (JSSI), the leading independent provider of maintenance support and financial services to the Business Aviation industry, appointed Brendan Lodge as aircraft acquisitions specialist. An experienced aircraft sales broker and financier, Lodge will provide support to JSSI’s growing Advisory Services and JSSI Parts divisions. In addition to growing this service, Lodge will identify and review strategic aircraft acquisitions for JSSI Parts, the single largest purchaser of parts and maintenance services in the business aviation industry.

Sharon Klose has joined West Star Aviation as director of Engine Programs. Klose has over 30 years of experience in aviation and most recently, she held the role of senior sales/service engine manager at Duncan Aviation for the past 10 years. Previously, Klose held similar roles at KC Aviation and Honeywell. In this role, she will be focusing on expanding West Star’s engine capabilities and developing new programs by partnering with engine OEMs, MROs, aircraft program managers, and will provide assistance and guidance to West Star’s regional and technical sales teams.

FlightSafety International announced that Scott Politte has been named manager of the company’s Wichita East Learning Center. He succeeds

Brian Moore

Brian Moore who has been promoted to executive director, Operations. Also at FlightSafety International, Danny Robayo has been promoted to regional operations manager, who continues to serve as manager of the company’s Learning Center in Teterboro, New Jersey. Brian Moore has been promoted to executive director, Operations, and Scott Politte assumes Brian’s previous responsibilities as manager of the Wichita East Learning Center. Chad Raney, meanwhile, has been named assistant manager, Wichita East Learning Center.

The ExecuJet Aviation Group has appointed Gavin Kiggen as vice president, Africa, with responsibilities covering the ExecuJet bases in Johannesburg, Cape Town, and Lagos, Nigeria. In 2008, Kiggen joined ExecuJet’s Flight Operations Department as aviation services manager, moving to flight operations manager in 2009. In 2014, Kiggen was promoted to director of aviation, Africa.

Duncan Aviation announced that Scott Kruise has joined the Avionics Install Sales team in Lincoln, Nebraska. In the 10 years Kruise has worked at Duncan Aviation, he has served as an Avionics Install Technician and Crew Lead. Installing avionics equipment on aircraft has given Kruise hands-on experience with both aircraft and customers, and he intends to use the knowledge he’s gleaned over the last 10 years to help customers make the best decisions possible regarding their investments in equipment and upgrades. Also at Duncan Aviation, Jake Keel, lead mechanic for the Provo, Utah, Challenger team, will now take his considerable knowledge, experience and tools on the road for customers who need assistance where their aircraft is located. Specifically, this seasoned airframe mechanic will travel to wherever Duncan Aviation’s customers are AOG and in need of help. Keel will cover most of the Western United States.

Scott Kruise

Michael E. Roach has joined CAE’s board of directors. Roach served as president and chief executive officer of CGI from 2006 to 2016 where he led a highly successful growth strategy, enabling the company to become one of the foremost information technology and business process services firms in the world.

Jill Plumb

Richard Walker has been appointed business development director for Osprey Flight Solutions, a brand new company which is introducing a major step change in aviation security expertise. Based out of Leeds, UK, Richard’s day to day role will include building the sales pipeline, closing deals and increasing brand awareness of Osprey and its innovative technology, airport and airspace intelligence. Enhancing the level of service provided to customers and shareowners and positioning itself for further growth, Executive AirShare has created a new leadership position within the company. The nation’s third-largest fractional aircraft ownership company announces that Jill Plumb will serve as vice president of marketing, corporate communications and customer experience. This new position oversees all marketing and corporate communication activities, and assumes responsibility for customer experience, which includes Executive AirCare, Executive AirShare’s team of best-in-class customer service specialists, who handle reservations, catering, logistics and other travel needs.
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CAE REPORTS
2Q 2018 RESULTS

CAE reported revenue of $646.0 million for the second quarter of fiscal year 2018, compared with $635.5 million in the second quarter last year. Second quarter net income attributable to equity holders from continuing operations was $65.2 million ($0.24 per share) compared to $48.3 million ($0.18 per share) last year. Excluding the gain on the divestiture of the Zhuhai Flight Training Centre (ZFTC), net income in the second quarter would have been $58.2 million ($0.22 per share).

Second quarter total segment operating income was $109.3 million ($95.0 million before ZFTC gain) compared with $85.8 million in the second quarter last year. All financial information is in Canadian dollars unless otherwise indicated.

### SUMMARY OF CONSOLIDATED RESULTS

<table>
<thead>
<tr>
<th>(amounts in millions)</th>
<th>Q2-2018</th>
<th>Q1-2018</th>
<th>Q4-2017</th>
<th>Q3-2017</th>
<th>Q2-2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$ 646.0</td>
<td>698.9</td>
<td>734.7</td>
<td>682.7</td>
<td>635.5</td>
</tr>
<tr>
<td>Total segment operating income</td>
<td>$ 109.3</td>
<td>97.8</td>
<td>120.9</td>
<td>101.4</td>
<td>85.8</td>
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<tr>
<td>Operating profit</td>
<td>$ 109.3</td>
<td>97.8</td>
<td>100.9</td>
<td>98.6</td>
<td>76.2</td>
</tr>
<tr>
<td>As a % of revenue</td>
<td>$16.9</td>
<td>14.0</td>
<td>13.7</td>
<td>14.4</td>
<td>12.0</td>
</tr>
<tr>
<td>Restructuring, integration and acquisition costs, net of tax</td>
<td>$ -</td>
<td>-</td>
<td>15.0</td>
<td>2.0</td>
<td>7.2</td>
</tr>
<tr>
<td>Net income</td>
<td>$ 67.0</td>
<td>65.4</td>
<td>69.1</td>
<td>69.3</td>
<td>48.9</td>
</tr>
<tr>
<td>Net income attributable to equity holders of the company:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>from continuing operations</td>
<td>$ 65.2</td>
<td>63.8</td>
<td>67.4</td>
<td>67.6</td>
<td>48.3</td>
</tr>
<tr>
<td>from discontinued operations</td>
<td>$ -</td>
<td>-</td>
<td>(0.7)</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Net income before specific items</td>
<td>$ 65.2</td>
<td>63.8</td>
<td>82.4</td>
<td>69.6</td>
<td>55.5</td>
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<td>Total backlog</td>
<td>$ 6,713.6</td>
<td>7,326.7</td>
<td>7,530.2</td>
<td>7,393.1</td>
<td>6,535.0</td>
</tr>
</tbody>
</table>

JETNET RELEASES FIRST NINE MONTHS OF 2017 MARKET INFORMATION

JETNET LLC, the leading provider of corporate aviation information, has released September 2017 and the first nine months of 2017 results for the pre-owned business jet, business turboprop, helicopter and commercial airliner markets.

Key worldwide trends were analyzed across all aircraft market segments, comparing September 2017 to September 2016. Fleet for sale percentages for all market sectors were down in the September comparisons, dropping a half of a percentage overall. Business jets and business turboprops showed the largest declines in the percentages for sale compared to the other markets. Business Jets are at 10.4%, compared to 11.5% at this same time last year. This is very good news, but we are just above the 10% line and still in a buyer’s market. Generally, inventories of pre-owned business jets for sale have decreased, and are now just above the 2,200 mark as well. Business jets are showing an increase (5.9%) in pre-owned sale transactions in the first nine months of 2017 compared to the same period in 2016. Also, business jets are taking the same amount of time to sell (313 days YTD) as last year at 312 days. Turbine helicopters showed an increase of 5.7% in YTD sales transactions, whereas piston helicopters saw a double-digit decline in YTD sale transactions, at 14.1%.

For the first nine months of 2017, there have been 6,060 pre-owned commercial and business jets, turboprops, and helicopters sold. This is an increase of 35, or a half-percent more sale transactions compared to 2016.

JSSI RELEASES Q3 BUSINESS AVIATION INDEX

Jet Support Services, Inc. (JSSI), the world’s leading independent provider of maintenance support and financial services to the business aviation industry, has released its latest Business Aviation Index for the third quarter of 2017. According to the index, which tracks utilization of approximately 2,000 business aircraft worldwide, average flight hours have reached levels not seen since the economic downturn of 2008.

Key findings in the third-quarter data include:

- Overall flight hours increased 4.5 percent year-to-date and 2.4 percent year-over-year since the third quarter of 2016. Average aircraft utilization of 29.11 hours in the third quarter represents the highest level since August 2008.
- When broken down by industry, the largest increases across nine industries were seen in the aviation and manufacturing industries, with quarter-over-quarter increases of 8.3 percent and 6 percent respectively. There was a 12.7 percent decrease in the consumer goods industry and an 8 percent decrease in the real estate sector.
- Of the seven regions tracked in the index, only North America showed a decrease in aircraft utilization quarter-over-quarter, with a 0.9 percent drop in flight hours. Activity in South America increased by 8.3 percent and Asia-Pacific by 8.6 percent.
- All regions increased flight hours year-over-year, with the exception of the Middle East and Europe. South America increased 7.1 percent, Central America increased 8.6 percent, and Africa reported the largest increase at 33.2 percent.
- Flight activity in North America increased 5.1 percent year-to-date, with an increase of 1.6 percent year-over-year.
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**Firm**
The Air Law Firm LLP is a boutique aviation law firm providing international legal services to the aviation industry.

**Practice**
We have an in-depth knowledge and understanding of the global aviation industry including the operational, regulatory, commercial and insurance sectors.

**People**
We are international lawyers, qualified in various jurisdictions and are independently recognised as leading experts in our fields.
OFTEN DESCRIBED as the ‘private jet’ sector, Business Aviation is actually a much broader church, not limited to a particular type of aircraft, technology, mission or crew configuration. It is an innovative, progressive industry with a host of new points of entry, modes of operation, and business approaches, to meet new market demands.

In recognition of this fact, at EBAA, we recently updated our definition of ‘Business Aviation’:

❖ Business Aviation provides closely tailored, flexible, point to point air transportation for individuals, governments, businesses and local communities in the most time-efficient way possible.

❖ It generally refers to an on-demand industry that consists of a mixture of commercial and non-commercial services that encompasses everything from charter to corporate and emergency medical flights.

❖ It makes people and businesses more efficient and contributes to connectivity and opportunities.

❖ Business Aviation is about the nature of the service provided, not about the size or type of the aircraft. It is both technology neutral and open to new technologies.

We are working closely with EASA, EU and national authorities to ensure that the regulatory framework accommodates the innovations and specific needs of the sector, including to allow for expanded and safer access to small airports and airstrips.

These are issues high on our members’ agenda and we are putting great effort into moving them forward. EASA’s approval of single-engine turboprop (SET) aircraft for commercial operations in Europe earlier this year is an excellent example of how, working together with regulators, we can achieve sensible, proportionate regulation.

While it remains to be seen whether commercial SET operations will become widespread in Europe, what is clear is that new business models offered by entrepreneurial upstarts are likely to stimulate the market by making it more attractive, particularly for passengers new to Business Aviation.

The SET fleet in Europe already numbers in the hundreds and puts hundreds more (shorter) airstrips into play, allowing people to gain more convenient access to their destination.

Runway performance is of course one of the key issues on our agenda at EBAA, because the regulation mandating using only 60 percent of the runway for commercial ops is outdated and no longer warranted, thanks to the strides that have been made to improve safety.

Just imagine how many runways would be opened up to commercial SET operations if we could raise that threshold to 80 percent, for instance?

This is consistent with our mission and advocacy role at EBAA: To enable responsible, sustainable growth for Business Aviation, enhancing connectivity and creating opportunities.

To this end, we are launching new initiatives to expand horizons and give people more options to be more productive. Stay tuned!
EBAA’S COMMENTS ON SESAR 2020 WORK PROGRAM

THE EUROPEAN BUSINESS AVIATION Association (EBAA) supports the setting-up of the SESAR 2020 Program and appreciates the SJU efforts to consider all business models.

EBAA believes however that, even if most of the programs will impact only a limited number of airspace users, there are elements that can have positive externalities for the entire community. In particular, EBAA has identified four KPs/Priority areas with high positive externalities that are not, or only partially, present in the SESAR 2020 program.

- Development of local/regional airports aiming at enhancing accessibility (SBAS navigation supported by enhanced vision systems) and safety (deployment of adapted ADS-B for IFR & VFR traffic allowing ASAS self separation in uncontrolled airspace, and terrain avoidance) with an emphasis on low ground infrastructure needs;
- Wake vortex free RNP Approaches (double glideslope with adaptive runway threshold) in major airports with the objective to increase capacity in a mixed aircraft category environment (light/medium aircraft behind upper/super heavy aircraft);
- PBN routes in complex TMAs ensuring independent arrival/departure to/from satellite airports while minimizing the impact on major airport traffic flows (through segregated flight paths) and on the environment (through multi-airports coordination and dynamic use of altitude constraints);
- Development at high altitude (at & above FL410) of free routes and block of altitudes to allow flight cruise optimization in large sectors and even unique sector at FAB level. For a sector-less airspace where ATC is conflict management oriented and where pilots are involved in the separation (ASAS).

These four areas can be included in the SESAR 2020 program without any major change to its current structure. And doing so would allow the SJU to secure the unconditional support not only of GA and BA, but also of numerous scheduled airspace users such as many regional airlines.

Single European Sky & ATM

The European Airspace is fragmented and will become more and more congested, as traffic is forecast to grow steadily over the next 15 years. The main objective of the Single European Sky (SES) is to dramatically change the European Air Traffic Management (ATM) in the 2020-2025 time-frame. The European Commission and EUROCONTROL, together with airspace users, ANSPs, manufacturers and airports, adopted in 2015 a revision of the ATM Master Plan. EBAA believes that the Communications, Navigation and Surveillance Systems For Air Traffic Management (CNS/ATM) paradigm shift needs to be well synchronized among all ATM stakeholders and needs to be based on a positive cost and benefit analysis for Business Aviation operators. If done according to these prerequisites, SESAR will improve bizav’s its environmental impact, its ATM cost as well as its access to airports and to airspace.

The Augmented Approaches to Land project (AAL) aims to demonstrate new approach and landing solutions that will increase the capacity of the European airport network, whilst reducing environmental impact. A 15-company-strong consortium (including Airbus, ANS CR, Dassault Aviation, DFS, DSNA, DLR, EBAA, Elbit Systems, Fraport, Honeywell, Lufthansa, NetJets, Skyguide, Swiss, and Zurich Airport) was formed to implement the project, which is co-financed by the SESAR Joint Undertaking. Over 200 demonstration flights will be performed by 2016 to validate new approach and landing technologies on a significant number of aircraft types and in an extensive range of airport environments. AAL aims to develop and demonstrate the feasibility of several advanced augmented approach procedures at all types of airports, based on five technologies: Curved Required Navigation Performance (RNP) legs; Ground-Based Augmentation Systems (GBAS); Satellite-Based Augmentation Systems (SBAS); Synthetic Vision Guidance System (SVGS); and Enhanced Flight Vision System (EFVS). The project will pave the way for the uptake of these technologies, needed to overcome limitations of the current Instrument Landing System (ILS) – equipment which is costly to install and maintain, and which does not offer the flexibility to optimize the flight path for fuel efficiency and noise abatement.
IMPROVING OPERATIONAL SAFETY is an issue facing the global business community that transcends all borders. Two sessions at the recently-concluded NBAA 2017 Business Aviation Convention & Exhibition (NBAA-BACE) brought regulatory authorities together with leading international stakeholders to address this vital issue from two different, yet interconnected perspectives.

The NBAA Single-Pilot Safety Standdown, held the day before the opening of NBAA-BACE in Las Vegas, NV focused on methods to develop a single-pilot safety culture without losing sight of the human element.

Paulo Ribeiro, head of safety for Central/North America and the Caribbean for Embraer Aircraft Holding, Inc. encouraged single-pilot operators to learn more about and come to understand their native culture, so they can predict and even improve their responses to an emergency in the cockpit. Pilots often revert to their native language, assumptions and attitudes in such situations, he added.
U.S. National Transportation Safety Board (NTSB) aviation safety investigator Aaron McCarter recounted a single-pilot accident scenario to demonstrate how an accident chain can unfold. “You have to understand how you can be affected by flying alone,” said McCarter. “You need to know what resources are available to you, and you always have to fly the airplane first.”

XOJET safety director Dan Ramirez detailed the NBAA Safety Committee’s new work on single-pilot safety data analysis, which aims to help NBAA proactively develop safety resources for single-pilot operators. He also laid out the group’s plan for customizing safety tools and resources for single-pilot and small flight department operators and encouraged single-pilot operators to share safety data through aircraft type groups, international safety organizations or other means.

The second safety-focused event at NBAA-BACE was the third annual National Safety Forum that focused on three of the NBAA Safety Committee’s 2017 top safety focus areas: fitness for duty, airport and ground handling safety, and loss of control in flight (LOC-I.)

David Ryan, chair of the NBAA Safety Committee, characterized fitness for duty as “our most fundamental issue.” Presenter Daniel Mollicone from Pulsar Informatics noted fatigue can lead to procedural lapses, increased distractions, errors and, in extreme cases, performance worse than those above legal intoxication levels. He further noted that inadequate or disrupted sleep can also exacerbate other health problems.

Airport and ground handling incidents, which Ryan called “our most frustrating and expensive issue,” were addressed by speakers including International Business Aviation Council (IBAC) program director Terry Yeomans, who detailed the recently-introduced International Standard for Business Aircraft Handlers (IS-BAH).

The forum’s final discussion examined a well-known, recent case study of a high-altitude wake turbulence event involving a Challenger business jet and Airbus A380 commercial airliner over the Arabian Sea. Presenters discussed the best practices for awareness, prevention and recovery from both high- and low-altitude LOC-I situations.

Safety has remained a high priority for NBAA since its founding in 1947, and is an essential part of creating an environment that allows Business Aviation to thrive. Regardless of where you operate, our industry must be safe and perceived to be safe – and I encourage readers of BART International to maintain their focus on safety while flying across Europe and around the globe.
GROWTH

Olympian Ruben Gonzalez (top). Technicians install the dome on top Honeywell’s JetWave (center). SmartNOTAM is being integrated into ARINCDirect services (below).

From what started as a niche show attracting 2,600 attendees in 2014 has grown into the must-attend event for FBOs, trip-planners, fuel-suppliers and anyone involved in the world of scheduling and dispatching business aircraft. Scheduled for February 6-9 in Long Beach, California, this year’s edition is set to welcome over 3,000 attendees and more than 500 exhibitors from around the world.

With the theme of Pursue Your Passion, SDC2018 will welcome four-time Olympian (and the first person to compete in four Winter Olympics in four different decades) Ruben Gonzalez. During the Opening General Session, he will share his experiences and tips for reaching
goals. This will followed by a busy schedule of educational sessions. For example, Universal Weather & Aviation’s Gary Martin and Juan Muniz will lead the Licensed Dispatcher Recurrent Training session. The course is designed for Business Aviation professionals who currently have a dispatcher’s license and wish to update their knowledge, skills and abilities with the latest information on duties and responsibilities. It is also open to advanced-level schedulers considering enrollment in a dispatch license program.

Other highlights from SDC2018’s education schedule include:
- Operating in in Africa/Middle East and India
- Navigating South America/Maneuvering Mexico
- Operating in Europe
- Know Before You Go: Planning for High-Traffic Events

Connecting You to Connectivity Solutions

Once again, connectivity will be an important and much discussed topic at SDC2018. Among those on hand exhibiting their connectivity solutions for bizav service providers will be Honeywell Aerospace. The aerospace giant recently announced that before the end of 2017, over 150 business jets will be flying with Honeywell-Inmarsat’s High-Speed WiFi. Honeywell’s JetWave hardware and Inmarsat’s advanced Ka-band high-throughput satellite network, Jet ConneX, allows data plans with up to 15 MBps and consistent global coverage. Both companies and their installation partners have received more than 25 type certificates and supplemental type certificates from EASA and the FAA – with more to follow.

However, operators don’t need extensive hardware modifications to enhance their on-board connectivity. At NBAA-BACE, Honeywell released an upgrade to its CNX-900 router, which allows Business Aviation operators to reap the benefits of wireless database loading. Connected aircraft equipped with Honeywell’s Primus Epic avionics system can remotely stage their flight navigation databases onto aircraft from Honeywell’s secure server. A simple software upgrade alleviates the manual hassle and logistics of getting the database to the aircraft while also giving passengers more flexibility in their connectivity options.

“Traditionally, operators had to bring equipment onboard or strategically plan missions to be home every time they needed to load a database,” says John Peterson, senior director, GoDirect Connectivity and Flight Support Services. “Now, with Honeywell’s CNX-900 router, the database can be stored on the CNX-900 over WiFi or cellular remotely anywhere in the world – and customers can easily initiate loading of database.”

Today, aircraft in a hangar need to physically connect a laptop to a data loader to transfer their databases. That transfer also involves a range of logistics, such as preparing databases onto media that need to be carried to the aircraft prior to commencing loading activities. Now, operators can save the time normally spent setting up equipment and scheduling flights around database loading.

“These types of aircraft upgrades demonstrate Honeywell’s commitment to delivering advanced services in the cabin and cockpit to help Business Aviation operators enjoy significant time and cost savings,” adds Peterson.

For Rockwell Collins, its ARINCDirect Flight Support Services is a growing business. In October, the company, together with Skyguide, launched a new product called SmartNOTAM. The product helps improve the way Business Aviation pilots get their mandatory pre-flight briefing without missing any relevant information. “The quality of ‘raw’ NOTAMS varies quite significantly around the world,” says Bob Richards, Rockwell Collins Senior Director of Flight Support Services. “We’ve partnered with Skyguide because they are improving the quality of NOTAMS by allowing them to be machine readable. With SmartNOTAM, Skyguide has created
a capability that can sort, filter and categorize NOTAMS, allowing a pilot to see only those that are relevant to his or her flight.”

Combining SmartNOTAM with ARINCDirect flight planning services gives pilots a new tool to improve the efficiency and safety of their flights. “The ARINCDirect flight planning application currently provides time, altitude and flight path information,” notes Richard. “By integrating SmartNOTAM with our flight planning service, ARINCDirect customers will have a seamless tool for reducing the number of NOTAMS.”

According to Richard, this could make a big difference for pilots. For an average transatlantic flight, a pilot can receive over 70 pages of NOTAMS. After sorting them using the ARINCDirect flight planning tools, the NOTAMS can be reduced by about 70%. “With SmartNOTAM, we’re working to improve safety and efficiency for Business Aviation pilots everywhere,” he says.

But content isn’t just for pilots, it’s also relevant for passengers too. Knowing this, at the Dubai Airshow Rockwell Collins signed an exclusive agreement with Orbit Showtime Network, the leading entertainment network in the Middle East and North Africa, for premium Arabic TV series on its Stage wireless streaming and content management service for business aircraft. The multi-year agreement provides Rockwell Collins with 3,000 hours of high-definition content, including dramas, comedies and lifestyle programming. “This is a great opportunity for our customers in the Middle East to get the content they want,” says Taylor Probsba, Director of Cabin Information Systems for Rockwell Collins in Dubai.

Let’s Talk Training

FlightSafety International, a long-time exhibitor at Schedulers and Dispatchers, will be in Long Beach to discuss their recently announced Platinum training services program. “FlightSafety Platinum provides new and innovative services, exceptional benefits and the highest level of training program customization available,” says Bruce Whitman, FlightSafety International Chairman, President and CEO. “Platinum was developed based on customer input and our goal to significantly enhance the value, flexibility and personalized training services they receive.”

Customers who enroll in the program will receive customized, evidence based training scenarios delivered by the instructors of their choice. They will also have advanced access to premium course scheduling and the ability to reserve course dates as soon as the schedule is published. Their instructors will also be available to fly their department’s aircraft or be part of the crew.

Platinum members will meet with FlightSafety instructors to develop highly customized training profiles based on their needs, industry trends, FOQA, SOQA, SMS and more. They will have complimentary access to FlightSafety’s wide range of eLearning courses. In addition, Platinum members will get preferred access to new-hire candidates who are graduates of the FlightSafety Academy Corporate Pilot Pathway program.
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In 2016, ICAO member states agreed on CORSIA, an offsetting scheme to compensate for emissions growth from 2020 levels.

According to the Federal Aviation Administration (FAA), in 2016, general aviation aircraft in the United States—which encompasses the Business Aviation segment—consumed an estimated 208 million gallons of avgas and 1,471 million gallons of jet fuel for a total of 1,679 million gallons of fuel consumed. The FAA forecasts that this number will increase to 1,744 million in 2017 for the United States—with avgas decreasing to 203 million gallons and jet fuel increasing to 1,541 million gallons. Scheduled US carriers alone account for approximately 17 billion gallons a year. “We estimate the Business Aviation segment accounts for about less than one percent of the overall aviation market when you consider military and other unscheduled operations worldwide,” says AvFuel Marketing and Communications Specialist Krista A. Lodes.

There is a similar trend happening in Europe as the number of general aviation movements continues to point upwards. As overall fuel consumption increases, here too the share of jet fuel is also increasing, while avgas continues to lose market share. Business Aviation is estimated to consume less than one percent of the overall jet fuel used in Europe. “If you look at the global fuel demand, the vast majority of jet fuel is consumed by airlines,” says Air BP

Being a major cost factor in the operation of a business aircraft, the market for fuel is highly competitive. Fuel providers try to attract new customers with expanded networks and enhanced services that make it more convenient for customers to buy the needed energy. But the industry is also looking beyond services and networks and towards redefining what we mean by aviation fuel. Volker K. Thomalla reports
Global GA Marketing Director Irene Loes. “Business Aviation consumes just a small portion of the overall jet fuel consumed.”

However, fuel consumption does not rise in parallel with the increase in Business Aircraft flights, which has historically been the case. Furthermore, even with the trend towards larger business aircraft, these newer aircraft are much more efficient than older generation aircraft and thus require less fuel. Nevertheless, fuel is a major contributor to any aircraft’s operating cost, and any shift in fuel prices has a direct impact on operating cost for any operator.

With fuel consumption on the rise and pressure from authorities, customers and the public to reduce its emission footprint, aviation is actively supporting the search for alternative, lower-emission fuels like biofuel and renewable fuels. Business Aviation has set stringent goals on emissions reductions, including reaching carbon neutral growth by 2020 and a 50% reduction in total carbon emissions by 2050 (relative to 2005 levels). According to some authorities, alternative fuels could account for 40% of these reductions.

Introducing CORSIA

The aviation industry has taken a leadership role on climate change, with a robust plan to reduce emissions based on a comprehensive set of goals. After 2020, technological, infrastructure and operational efficiency measures will be complemented by ICAO’s Carbon Offsetting and Reduction Scheme for International Aviation’ – known as CORSIA. “CORSIA will help the industry meet its goal of carbon neutral growth from 2020 in support of the Business Aviation Commitment on Climate Change,” says EBAA CEO Brandon Mitchener. “Aircraft operators whose operations are covered will offset the growth in their carbon emissions in international flying on an annual basis from a 2020 baseline.”

Although most business aircraft operators will not be covered by CORSIA, some will be required to participate in the program. There are several important exemptions under which many operators will fall. First, CORSIA applies to international flying only, meaning domestic flights are not covered. Operators that emit fewer than 10,000 tons of CO₂ in international flights annually are exempted as well as aircraft under 5,700kg MTOW and humanitarian flights like medical, disaster relief and firefighting.

Leadership from within the Industry

But much of Business Aviation’s move towards fuel efficiency is coming not from rules and regulations, but from the industry itself. For example, since 2015 Gulfstream Aerospace has been demonstrating how renewable fuel is suitable for the day-to-day operations of business aircraft. The OEM and its fuel supplier, World Fuel Services, have a three-year agreement that provides Gulfstream with a consistent supply of renewable fuels for its daily flight operations in Savannah.

The fuel is a 30/70 blend of low-carbon, drop-in renewable fuel and Jet-A. It provides the same performance as conventional, petroleum-based jet fuel and requires no changes to factory-standard engines or aircraft. Each gallon of renewable fuel burned is expected to achieve a more than a 50% reduction in greenhouse gas emissions, relative to petroleum-based jet fuel, on a lifecycle basis.
This agreement with World Fuel is seen as a testament to Gulfstream’s commitment to sustainability. Gulfstream was the first business aircraft manufacturer that flew its full fleet to NBAA-BACE on renewable fuels, and the Gulfstream G450 is the first business jet to have crossed the Atlantic using renewable fuels.

Gulfstream also uses renewable fuels on its Airborne Product Support aircraft, which are operated by Gulfstream’s Savannah-based Field and Airborne Support Teams (FAST). FAST includes technicians and flight crews who travel on dedicated Gulfstream G150 aircraft to deliver parts and/or people to Gulfstream operators within North America, Central America and the Caribbean. Furthermore, the fuel is also used for corporate flights, flight-test aircraft and, eventually, customer aircraft.

Logically, the fuel companies are also looking towards alternative fuel options. For example, to help support industry development, Avfuel created the Avfuel Technology Initiatives Corporation. Founded in January of 2012, the company’s mission is to further industry advancements, including bio and renewable fuels on several fronts, and no-lead avgas replacements, domestically and internationally. In addition to the development of these products, Avfuel Technology Initiatives Corporation thinks through the logistics of market introduction to help ensure any new product is sustainable, reliable, competitively priced, and fairly accessible.

Air BP is also actively working with partners to develop renewable jet fuel. A year ago, the company announced the creation of a strategic partnership between its BP Ventures and Air BP with Fulcrum BioEnergy, a pioneer in the development and production of low-carbon jet fuel. Fulcrum processes municipal solid waste into transportation fuels, including jet fuel and diesel. BP has invested $30 million in the partnership and has secured a 10-year offtake agreement with Fulcrum for 50 million US gallons per year. In addition, as a preferred supply chain partner, Air BP will distribute and supply biojet into aircraft at key hubs across North America.

“We have a deep understanding of our customers’ challenges to achieve their lower carbon goals, and this agreement gives Air BP guaranteed access to a product that will help meet these challenges,” says Air BP CEO Jon Platt. “Securing this supply helps secure the future competitiveness of Air BP and our place as a leader in the industry.”

At NBAA-BACE in October, Air BP has signed an agreement with Signature Flight Support that will allow Signature’s customers to offset CO2 emissions resulting from their travel, starting as early as January 2018.

Carbon emissions from jet fuel purchased by Air BP Sterling Card holders at any participating Signature location in the US will be offset via BP Target Neutral, the oil company’s voluntary carbon offsetting program. As part of the deal, Signature will increase its Sterling Card acceptance in the US to more than 100 locations.

**Ensuring quality and supply**

With new fuels coming to market, there’s a question as to how fuel providers can ensure the constant quality of the fuel they are supplying. For Avfuel, they are answering this question by leaning on its operational expertise across the entire aviation value chain. “As fuel moves from the refinery to the fuel supply terminal to the FBO or airport, it undergoes rigorous testing to verify it meets industry specifications for quality,” explains Lodes. “Then, when the FBO or airport receives the fuel, it is again tested before it is placed into storage.”

Once in storage, Lodes explains that the FBO or airport staff tests the fuel on a regular basis to ensure contaminants have not compromised the integrity of the fuel, ensuring it stays clean and dry for safe use in aircraft. “While Avfuel’s hands have left the process by this point, this is where proper training for FBO and airport staff members comes into play,” she says.

For this reason, Avfuel developed its online learning management system to offer its branded network cost-effective training solutions. The online Avfuel Training System includes the Avfuel Rampside Training program (ART), which features 18 lessons and multiple additional downloadable resources concerning fuel handling and safety protocols. The Avfuel Training System complements hands-on training initiatives with video tutorials, proficiency tests and supplemental training guides. In addition to online training, Avfuel offers an FAA-approved, Part
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Avfuel recently unveiled a new designator on its avfuel.com fuel finder: ATS for the Avfuel Training System.

LAUNCH

Avfuel recently unveiled a new designator on its avfuel.com fuel finder: ATS for the Avfuel Training System.

139 quality assurance and fire safety seminar. In addition, Avfuel’s in-house quality assurance team (available 24/7/365) helps ensure the integrity of fuel from the refinery to the wingtip and is always available to help troubleshoot and solve any quality control concerns a customer may have.

Air BP also has a strict protocol for handling and controlling the quality of its products. “We consider ourselves a leader in safety,” adds Lores. “It is our first priority to deliver our customers a safe product of the highest quality.”

Meanwhile, Shell Aviation, the aviation branch of the Dutch-British energy giant, has implemented a so-called Health, Safety, Security and Environment Management System (HSSEMS) that assures product quality throughout the supply chain by setting strict standards for facilities and procedures. The company provides fuel for almost two million aircraft, refueling an aircraft every 14 seconds. Without a strict safety and procedure protocol that’s globally valid, it couldn’t be done properly.

Shell standards define requirements for airport operations, process safety and asset integrity. The company conducts over 400 audits and inspections annually to ensure that its airport operations meet their health, safety, security, environmental and operational standards. There are several essential training programs behind Shell’s operational excellence. The company conducts on average 24,000 hours of Aviation Competence and Education (ACE) training for Shell operators annually.

A Competitive Market

The market for aviation fuel is highly competitive. As a result, fuel providers try to differentiate themselves from the competition by adding additional services, which add value to the customers and serve their needs.

More often than not, having a widespread network is as mandatory as having a number of different payment methods. For example, Avfuel combines global access throughout a fueling network of more than 3,000 locations worldwide and 650+ Avfuel-branded dealers. “In terms of Avfuel Contract Fuel locations, we’re continuously looking to expand on a global scale to ensure our customers receive a reliable, quality, competitively-priced product on every leg of their trip,” says Lodes. “In terms of branded FBOs, our concentration remains focused on the Americas and Europe, as these continents provide a bulk of the general aviation business and their market trends appear to be compatible with growing our business.”

“Avfuel always has its ear to the ground, listening to customer needs and identifying opportunities to offer greater services,” she adds. “This year, we launched two new programs – Avfuel Network Referrals and Avfuel Network Rewards – to provide our network FBOs with greater connectivity and our pilots with valuable information and rewards.”

Avfuel also operates its own in-house equipment shop where its team builds, maintains and refurbishes the United States’ largest fleet of refueling equipment (more than 700). This team continuously works to fine-tune the operation of Avfuel’s trucks in order to prevent down time, reduce wear and tear on the equipment and...
promote safer and more efficient functionality. “Moving forward, we have our eye on some key partnerships that will enhance the customer experience at the planning stage with the use of state-of-the-art technologies, as well as other beneficial partnerships,” says Lodes. “We’re always working on something fresh at Avfuel for our customers, recognizing it’s important to adapt to their needs – it’s not just about fuel, it’s about the user’s experience.”

In mid-November, Avfuel unveiled a new designator on its web-based fuel finder: “ATS” for “Avfuel Training System”. When operators search for fueling locations at avfuel.com, they can identify which Avfuel-branded FBOs subscribe to the training system, in addition to the availability of Avfuel Contract Fuel and its pricing and the availability of AVTRIP and special promotions. By clicking on the ATS designator in the symbol key, pilots and/or fuel decision makers can learn more about how Avfuel-branded FBOs, train their staff members in the proper handling of fuel and ramp-side services. This means flight departments can rest assured that their aircraft and passengers are in capable hands when flying in the Avfuel Network.

Developed with the FBO in mind, the online Avfuel Training System offers valuable instruction on safe procedures and industry best practices for ramp-side, front counter and customer care service. “Now, savvy fuel decision makers will not only be able to see the contract fuel price and amenities at the FBO, but also that the FBO’s staff participated in Avfuel’s comprehensive, online training program,” says Lodes.

EPIC Fuels is a global supplier of fuels and services to FBOs, commercial airlines, airports, ground fueling operators, the US Defense Logistics Agency (DLA) and other government agencies around the world. The company has an extensive and diverse customer base of over 10,000 customers. EPIC is not tied to just a single supplier, but its EPIC Card is accepted at over 8,000 locations worldwide. Their largest customers include Fortune 500 flight departments, top-tier FBOs, major airlines, charter and cargo operators and all branches of the US military.

World Fuel Services is one of the largest, most successful contract fuel supplier in Business Aviation. It has more than 3,000 fueling locations globally, including 75 Air Elite Diamond Service FBOs. In 2016, World Fuel Services sold 7.1 billion gallons of aviation fuel. The company partners directly with oil companies, FBOs and major suppliers. This vast supply network has been carefully crafted and provides its Colt Contract Fuel Card holders exclusive access to preferential fuel prices at all of World Fuel Services’ locations. The company’s international strength provides added conveniences, such as the option to use the World Fuel Colt Card to pay for handling fees at locations throughout Europe. Cardholders also have access to a tax recovery program that assists with tax exemptions, refunds and reductions.

World Fuel Services theme “beyond fuel” is underlined by the additional services the company offers to its customers, including a full suite of trip support. From flight planning to weather briefing, ground handling, catering, regulatory services, transportation and security –
World Fuel Services offers the whole range of flight support to strengthen the relationship with its customers. It offers its services on different platforms, suited to the customer’s needs. World Fuel Services has teamed up with more than 17,000 service providers worldwide and its Avcard is accepted at over 7,600 locations.

Through its direct operations, Air BP fuels more than 6,000 flights every day – that's over four aircraft every minute or one every 15 seconds. The company supplies fuel at more than 800 global locations in over 50 countries serving customers from the private pilot to some of the world's largest airlines. Customers range from domestic and international airlines, the military, business and private aircraft owners, as well as international airports and airfield operators.

“We are a major player in the market and we continue to expand the market and the number of airfields we’re serving,” says Irene Lores. “But we’re focusing less on volume and more on convenience for our customer.”

Supporting its fuel offer, Air BP provides a range of services for customers, including technical expertise via a complete aviation fuel consultancy service. Other services include supporting customers to meet their environmental goals, the Air BP Sterling Card for efficient general aviation refueling, and the RocketRoute Marketplace that lets users purchase fuel and connect with thousands of ground handlers, FBOs and aviation providers worldwide.

In September, BP announced the creation of a strategic partnership with Victor, a leading on-demand marketplace for private jet charters. BP Ventures has committed to invest an initial $10 million in Victor. In return, Air BP becomes the preferred fuel supplier for flights arranged via the Victor digital platform at Air BP locations. Air BP, which has a growing digital presence, stands to further benefit from this cooperation. Victor was launched in 2011 and provides quick, easy and efficient ‘on demand’ jet charter booking services for passengers by connecting them with business and private jet operators using a proprietary digital platform underpinning its sales, marketing and customer service functions. Victor will continue to innovate and develop its core digital platform. This will allow operators to participate in a more streamlined charter quote, booking and settlement process. Victor will also trial an initiative giving customers the chance to offset carbon emissions from their Victor-booked flights via BP Target Neutral.

“Digital technologies are playing a vital role in transforming the Business Aviation sector,” says Air BP CEO Jon Platt. “This collaboration brings Air BP together with a leader in this emerging space in the industry, combining strengths and capabilities to support our customers as they work towards a lower carbon future.”

Last but not least, Shell Aviation supplies fuel to around 900 airports in 36 countries. In Europe, the company serves over 1,000 customers in 17 European countries. The latest additions to the vast network includes Salalah airport in Oman, Sofia in Bulgaria, Mactan-Cebu International Airport in the Philippines and Brussels International Airport in Belgium. But Shell Aviation is not limited to fuels. It also offers lubricants and services to all aircraft types. The company is one of the few energy companies with research and development facilities dedicated to the aviation sector that cover aviation fuels, fuel handling and lubricants.
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Operating an FBO is anything but simple. There are tons of aspects, target groups, additional services and unexpected needs that you have to take into consideration whenever an aircraft pulls up to your tarmac. If you’re planning on entering the fixed-based operations market, you’ll basically have to be able to do everything.

Nick Klenske reports
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When it comes to selecting an FBO, you have options – and lots of them. According to the National Air Transportation Association (NATA), there are over 3,500 FBOs in the US alone each offering a dizzying array of services. However, this wasn’t always the case. Back in the early days of Business Aviation, an FBO was basically a fuel sales point on the airfield, a storage tank or, if you wanted to get fancy, a mobile re-fueler or two. They were simple to use, you basically called and they would come to service you either where you were parked on the field or at the pumps.

But with growth and maturity – especially as the private business aircraft became a reality – these early FBOs grew to include more and more services. First were the dedicated ramp spaces, then came the buildings and new passenger and crew amenities. At the same time, they also developed the service acumen that has become prevalent today: being a one-stop-shop, serve-all solution for making the Business Aviation experience something special and unique.

Today, an FBO represents a very high-end concierge approach to handling multiple needs and concerns and empowering the use of direct and indirect services and products. In many cases, for every one person you see at an FBO, the operation provides direct and indirect employment to several more downstream – all of whom make up the service support team of the operation.

In recent years, the biggest growth for this sector has been amalgamation and joining of forces under a network banner of some sort. Our trade
publications are full of headlines about one or two previously independent sites becoming part of or affiliated to the chain-type of operations. Under this concept, the user gets to work with volume buying power, should be dealing with a common set of service standards and business methodologies and, in many cases, a common look and feel to everything – right down to the bricks and mortar of the site.

The concept works well for those who want to deal with single-stop planning and scheduling options, buy-

ing discounts from leveraged and collective purchases and a general safety in the big numbers approach. If you feel comfortable and enjoy this approach, then there are some great chain FBOs located all over the world that you will enjoy working with. For example, Signature Flight Support operates a combination of fully-owned Signature sites plus an always growing number of Signature Select FBOs. Signature Select members are independently owned and maintain their brand with the addition of the Signature Select badge. They are supported by Signature Flight Support’s global sales and marketing teams and are promoted along with the full network.

Among the brand’s many selling points, they note that dealing with any Signature in the network comes with personalized customer service and point-to-point coordination of handling and flight support services. Also, participating FBOs offer the Signature Status and Signature TailWins customer loyalty and rewards programs. Loyalty programs and pass-along services are one of the selling points to the use of a chain FBO, and Signature has long been a leader in this role.

ExecuJet, part of the Luxaviation group, provides a diverse range of FBO and aircraft aviation service solutions, including specialized and tailored services to accommodate VIP, diplomatic and crisis flights. These services include flight planning, arranging overflight and landing clearances and organizing inflight catering. The company also provides a complete menu of ground handling and concierge services, including: aircraft, passenger and baggage handling; fuel; aircraft valet and hangarage; security, customs and immigration; and limousine transfers. Passengers and crew can also make use of private facilities at each ExecuJet FBO.

Of course, no discussion about chain FBOs would be complete without a visit to Jet Aviation. While not the largest, they do have an impressive footprint spread across the entire globe – giving them bragging rights for most variety and number of countries in their network. Europe, the Middle East, Asia and North America all have a Jet Aviation presence – many of which are also leading MRO centers for the firm (more on this below).

Consolidation Continues

This list goes on and on, although one could make a sound argument that this list is becoming shorter and shorter. This is the result of the notable trend of many owners of previously independent FBOs opting to join the chains, either because they are nearing retirement, feel the time is right to sell or are getting ready to ride out the next inevitable market downturn.

According to ExecuJet Group FBO Director Ettore Poggi, consolidation is driven, in large part, by municipal governments who see FBOs as gateways to economic investment and opportunities for business growth. “When an FBO’s lease is up for renewal, an airport often pressures owners to invest in such high-end facilities and services as ground support equipment, refueling and de-icing trucks, fuel storage facilities and
For many independent FBOs, the cost of such investment isn’t worth it, so they either close or look to join an established standardized FBO network. “As part of network like ExecuJet, an FBO is better able to provide customers with improved efficiency, lower costs, expanded services, state-of-the-art facilities, new equipment and consistently high service standards – attributes often associated with a branded FBO,” says Poggi.

According to Poggi, one advantage of using an FBO network is that they can leverage economies of scale to offer customers tangible benefits and savings. For example, because of ExecuJet’s expansive network of FBOs around the world, the company can negotiate the purchase of Jet A1 fuel based on volume purchases and commitments across the network. Similarly, hotel accommodation, ground transport and many other services can be negotiated. “As a result, our customers benefit from these discounted prices,” he says.

Network FBOs are also better able to implement and maintain industry safety standards. “All ExecuJet FBOs meet NATA Safety First standards, and all will soon be IS-BAH accredited,” adds Poggi. The company’s Zurich FBO was the first in Switzerland, and one of the first in Europe, to become IS-BAH certified. Since then, ExecuJet’s Brussels, Berlin, Johannesburg and Delhi FBOs have also gained their certifications.
A Challenger 650 customer wanted to redesign their aircraft lavatory. By extending the size of the vanity and shifting the toilet, the lav is more accessible to passengers. “We did all of the engineering up front,” says Project Manager Darrell Miller, “and we now have an STC (Supplemental Type Certificate) for the redesigned lavatory. So far, we have completed four aircraft with this new design. With the experience of the first two under our belt, we were able to deliver the second two Challenger 650s early.”
“Having this level of standardization is important, as it not only shows the quality of an FBO’s support services, but also demonstrates the commitment to using the most comprehensive assessments available in order to continuously build on safer and more consistent operations,” says Poggi.

Although consolidation seems to be the name of the game, it doesn’t mean the end of the independent FBO. To help these ‘mom and pop’ shops compete, many have opted to join the Paragon Network. Founded in 2011 by Paragon Aviation Group, the Paragon Network is a distinguished network of 27 independent FBOs that provide an elite experience to general and Business Aviation travelers world-wide. Paragon performs a comprehensive audit of the facility and services offered to ensure the quality of the member base before any FBO joins the Paragon Network. Each member FBO must comply with a set of strategically developed core standards to remain in the group.

However, even independent networks are feeling the winds of consolidation. On 22 November, Paragon Aviation Group announced a strategic collaboration with the Luxaviation Group to create a FBO network of 52 FBOs around the world, 25 of which are in the US. The strategic collaboration includes Luxaviation Group FBO management company, ExecuJet, Paragon Aviation Group and BAA (owned by CMIG Aviation and part of the China Minsheng Investment Group), which provides high-level aircraft manage-
ment services for business owners in the Greater China region. All ExecuJet FBOs will join the Paragon Network in the coming months, thus doubling the size of the Paragon Network and providing a substantial international presence. In addition, the Paragon Network will see its traffic increase significantly, as they are now the preferred FBOs for both the Luxaviation Group and BAA’s combined fleet of more than 300 business jets.

"We are proud to have the opportunity to combine our expertise and create an even larger FBO network of more than 50 FBOs," says Luxaviation Group CEO Patrick Hansen. "We have a strong commitment to service excellence and the Paragon Aviation Group enhances and extends our high-quality standards of services that we offer to our clients throughout our FBOs."

"We are looking forward to bringing the expertise of two elite FBO networks together to enhance the customer experience as they travel around the world," adds Paragon Aviation Group President and CEO Mike Delk.

Getting You Ready for Takeoff

When we talk about FBOs, much of the discussion tends to focus on the services made available once you land. However, to think of FBOs only as a post-flight service would be a mistake. After all, most of the work happens before your aircraft’s wheels ever leave the ground. This is why an FBO isn’t really an FBO if it doesn’t also serve as your flight support center. For the uninitiated, planning a trip may seem as simple as moving from point A to B. But when your trip involves being airborne, there’s a lot more that comes into play. Regardless of where you are departing from, your trip support provider must liaise with the relevant airport traffic control (ATC) to review upcoming weather, possible congestion and – especially when you’re already en route – last-minute changes through NOTAMs.

Notices to Airmen are communications between the airports authorities and airborne pilots to alert the latter in case of anything unexpected. A trip support provider will monitor any incoming or outgoing NOTAMs and alert pilots and crew onboard of anything out of the ordinary – even if it’s about your parking spot being taken at your destination airport. What’s more, any decent trip support provider will also monitor your flight – from tarmac to tarmac. Modern technology allows for real-time flight tracking methods, again to make sure the right people are alerted at the right time should anything be out of order.

Perhaps less known, but equally important, are the runway analysis, aircraft load and trim sheets. Every runway has a different configuration, and every aircraft has a different load. Your trip support provider will analyze both to make sure you meet the regulatory and payload restrictions and provide your crew – maybe even without you noticing – the necessary and required manifests to ensure a safe and comfortable flight.

Lastly, and most likely one of the most important aspects of planning a trip, is the sophisticated and ever-changing world of permits and permissions. Any trip support provider that wants to be taken seriously should have the knowledge the size of a bible when it comes to permits. Any flight requires the verification of landing slot regulations, visa requirements, customs, immigration and quarantine (CIQs) procedures, cabotage requirements, overflight permits and fees per country – along with any other country-specific regulatory requirements. Wherever you’re flying to, you’ll be happy to see your trip support provider assess the safety of your destination.

Security planning is another important aspect of trip planning, particularly when transporting head of states, celebrities and VIPs. Is there a threat-level at my destination? What’s the safest route to my hotel? Should I post a guard next to my aircraft? International trip support provider Universal Aviation will ask – and answer – these questions for you. According to Tracie Carwile, Client Relationship Manager for Universal Private Transport, a joint venture between Universal and FAM International Security, airports are predominantly secure locations. “In general, security issues are more likely to be a factor off-airport – in the city, local area or hotel you’re visiting,” Carwile explains. “Business travelers often need to travel to destinations with assorted local security risks, so it’s important to know and understand the risks before you go.”

The company was recently voted as Asia’s best ground handling agent/FBO by members of the Asian Business Aviation Association (AsBAA) for Flight Planning in the corporate flight planning industry (left). AsBAA honored 2017’s industry icons in November (right).
(AsBAA). “We’re so proud to have been selected best ground handler/FBO in Asia by members of AsBAA,” says Sarah Kalmeta, Regional Director of Operations, Asia-Pacific, Universal and a member of AsBAA’s Board of Governors. “Business Aviation in Asia continues to grow at a rapid pace, and we remain fully committed to adding new locations and services where our customers need us to help reduce their operating risk and stress.”

Universal Aviation, the ground support division of Universal Weather and Aviation, Inc., has more than 40 locations in 20 countries, including 19 in the Asia-Pacific region.

Also well-known for its global trip support services is Jetex Flight Support. It’s worthwhile to take a closer look at the company’s short but busy history. Launched in a single office in Dubai in 2005 as a flight support and charter enterprise with a fleet of six aircraft, today Jetex operates over 40 FBOs in 20 countries and on every continent.

Over the course of 10 years, the company exponentially expanded its services – and footprint – through the acquisition of aircraft handling facilities at Paris Le Bourget and London Oxford, officially marking its entry into Europe. South America quickly followed, when the company started to supply fuel to operators and airports in Brazil. Several important partnerships have helped the company expand its reach as well. An agreement with members-only mobile charter marketplace JetSmarter saw most of the company’s charter flights fly through Jetex facilities. Another deal with Honeywell in 2013 saw Jetex re-sell the former’s Global Data Center flight support services, and in exchange Honeywell customers could rely on Jetex trip planning services.

Most noteworthy about Jetex is its tremendous growth in locations over the past three years. In 2014, the company set up a new handling facility at Ninoy Aquino International in Manila, the Philippines. Aside from its regular trip support services, the company offers fueling, concierge and even charter services.

In the same year, Jetex officially opened its US headquarters at Miami International, Florida. Jetex Regional Sales Manager Heather Satchwell referred to the new site as “an important hub in our international network” and as “a strategic gateway into North America with easy access to both Latin and South America.” Three locations followed in 2015 – respectively one in Chile and two in Tokyo – followed by another six in 2016 – the company’s landing in France through the opening of an FBO at Marseille, and a license agreement for five new FBOs in Morocco.

This year saw the company arrive in Spain – with three FBOs spread out over the country – land at Rome’s Fiumicino Airport in Italy and expand its presence in France with no less than 15 locations through a co-branding agreement with French airport developer Edéis. What’s more, announcements dating only back to October and November revealed that Jetex will be developing the first private terminal at São Paolo’s Guarulhos International Airport in Brazil and be the operator of the first-ever FBOs in Oman, respectively in Muscat and Salalah.

On the Ground and Running

So now, thanks to the trip planning support provided by your FBO, you’ve made it. The aircraft is on the ground and you’re ready to get to your important business meeting. But as most meetings are held in city centers, and most FBOs and airports are located well-outside the city, how do you get from the jet to the boardroom? And where do you stay while in the city for business? This is where the all-important concierge services come into play.

Although ground transportation is a standard service for many FBO operations, it’s one that is often left out of discussions. Given the overall stature and level of luxury of flying in a business aircraft, one can assume that the quality of the car should at least match the quality of the FBO. After all, if you’re flying in style, you might as well ride in style!

There are a handful of FBOs whose service offering includes hiring a chauffeured luxury car to meet you jet-side. One of them is the aforementioned Jetex. In 2013, the company announced that it had signed an agreement with Bentley Motors Middle East through which a luxury chauffeured car service, consisting of three 2014 Bentley Mulsanne vehicles, would be installed at its Dubai World Central FBO. Over the course of three years, that service upgraded over a Rolls-Royce Ghost fleet to its present fleet of three “epitome of comfort” Rolls-Royce Phantoms. Another company offering a similar service is Millionair, which operates FBOs throughout the US, Canada and the Caribbean.
Likewise, since its launch at NBAA2016, Universal Private Transport, the global ground transportation service joint venture of Universal Weather and Aviation, Inc. with its long-time security partner FAM International, has doubled its global reach and is now providing service at more than 900 airports around the world. An independent company, Universal Private Transport combines the worldwide Business Aviation trip management and logistical knowledge of Universal with the international ground transportation network of FAM.

“We launched Universal Private Transport because of the risk and stress this critical service was adding to our customers’ missions,” says Universal Chairman Greg Evans. “Over the last year, we’ve seen tremendous growth of this new company and have continued to add new locations to where we can offer this service. We’re now servicing 900+ ICAOS, covering 75 percent of all countries in the world.”

“What we’ve learned is that because of the complexity of Business Aviation missions, there is on average nearly four different ground transportation requests per trip,” adds Evans. “What our clients really like is having one contact number for all of their ground transportation requests, no matter how many stops they have. With Universal Private Transport, they know they will get the right car, on time and that when plans change, there’s no ripple effect because we see the entire scope of the mission and adjust accordingly.”

Universal Private Transport allows users to make ground transport arrangements and changes via phone, e-mail, SMS or online. They can also manage preferences for receiving confirmations, driver details, and updates for passengers and anyone else on their team. Currently, Universal Private Transport is on pace to deliver a 99.5 percent on-time delivery of all ground transport requests in 2017.

“In today’s world, it’s important to know who your driver is,” explains FAM International CEO Brian Leek. “Through our global network of crew and VIP ground transportation and our security expertise, you can be assured that when you use Universal Private Transport you will always have professional, courteous drivers and clear communications from licensed and insured providers. And we’re continuing to refine our driver list based on our own internal performance reviews and feedback we receive from our clients, making sure only the very best drivers are in our network.”

For those wanting more control over your ground transportation, or if your chosen FBO doesn’t provide the service, you also have the option of hiring your own car via a luxury executive transportation service. Most leading ground transportation management services have fleets comprised of high-end vehicles that can range from an executive town car to SUVs, hybrids, limousines and minibuses. When selecting a ground transportation company, be sure that they use flight-tracking systems to monitor your exact arrival time. They should also be available 24/7. Leading companies include: Stack Premier Transportation, Limousines Worldwide, S. Limo System and Leros Point to Point, among others.

There’s also the Do It Yourself option where you rent a car and drive yourself. Many luxury car rental services, such as Go Rentals, will deliver your rental directly to the FBO door. Companies like Enterprise and National also offer special services for private jet passengers via select FBOs.

Then of course there’s the option of staying airborne and traveling from the FBO to the city via helicopter. For example, several years ago London’s Biggin Hill Airport launched its London Heli Shuttle. The service provides passengers with the option of being whisked from the airport to downtown London’s Battersea Heliport in just six minutes.

In addition to ground transportation, standard FBO concierge services also include hotel arrangements, event coordination, securing tickets and helping with security.
While You’re Away

Now that you’re safely in your executive vehicle and well on your way to a meeting, what happens to your aircraft while you’re away? If you are flying in a chartered jet, you don’t have to worry about anything upon landing – aside from perhaps paying the bill – but if you’re flying (with) your own business aircraft, you might have to consider where to leave the aircraft on the ground. Our recommendation is to not leave it sitting alone on the tarmac!

Luckily, you have better options. For example, if you’re a regular flyer and always departing from the same airport, a fixed parking slot or hangarage space is the way to go. An FBO without a hangar is like a house without a roof. As a result, most FBO operators have hangars adjacent to their FBO facilities. Signature Flight Support even has a service section on their website promoting their real estate opportunities. Through their listings on the Hangar Network, aircraft owners can hire, acquire or lease hangarage at a long list of regional, national and international airports around the world.

As Business Aviation is about efficiency, or better, about efficient business, why not take advantage of your downtime to take care of some of that maintenance you’ve been putting off? Better yet, why not let your FBO take care of your aircraft’s maintenance needs for you?

Many companies provide both FBO and maintenance, repair and overhaul (MRO) services all in one place. Perhaps no one does this better than Jet Aviation. Not only does it have a network of FBOs across Europe, the Middle East, Asia and North America, many of these are adjacent to a Jet Aviation MRO shop. From its roots in Basel, Switzerland, the company provides maintenance services to large-cabin aircraft from its MRO hubs in Basel, Dubai, Singapore and St. Louis – all complemented by other maintenance bases across the EMEA, Asia and North American markets.

Each Jet Aviation maintenance facility serve as premium service centers approved by all major manufacturers and rated as jet aircraft repair stations by aviation authorities worldwide. Regardless of aircraft type or size, whether it requires routine inspection, unscheduled or heavy maintenance and overhaul or even structural repair – you can rely on Jet Aviation to return it to you with minimal downtime. And if this wasn’t enough, if you ever find yourself grounded due to technical problems, the company’s 24-hour AOG team of technicians can be immediately dispatched to make sure your aircraft becomes airworthy as quickly as possible.

Keeping You and the Crew Fed…

While at the FBO, passengers and crew need to eat, and here too FBOs come to the rescue. Although many of the key FBO players in the Business Aviation market offer in-house catering, many actually do so via the services of third-party catering companies. One such company is Air Culinaire Worldwide. A Universal Weather and Aviation company, Air Culinaire serves in-flight catering to hundreds of airport locations across the globe. With 22 owned-and-operated kitchens and hundreds of associate catering partners on six continents, with Air Culinaire, Business Aviation organizations receive the total in-flight catering experience from a single source.

In September of 2017, the company made its Crew Meals app available for Business Aviation clients via Apple and Android smartphones. With the app, flight crews can order crew meals at the click-of-a-button via the company’s Tampa and New Jersey kitchens – with other locations to follow. The app is user-friendly and offers a low-cost, fixed menu. Crew meal items are limited to breakfast, lunch, dinner and beverages and cannot be customized. A restriction on modifications allows for a lower price point.

“We have listened to our customers and have made great strides to turn their feedback into something impactful,” says Air Culinaire Worldwide CEO Clifford Smith. “Our goal is to simplify the ordering process while embracing the need for low-cost crew meals.”
Another trend is for Business Aviation airports to team up with a catering company to provide customers with a truly gourmet experience. Leading the way on this trend is Italy and, more specifically, Milan where SEA Prime, manager of the Business Aviation airport Milano Linate Prime, and on-board catering company Gate Gourmet Italia teamed up to launch Prime Gusto. The bar and restaurant, located at Milano Linate Prime, offers both crew and passengers a unique, enogastronomic experience and catering service featuring top-quality Italian and international fare.

The on-location bar and restaurant is designed to portray the quality of food and service that customers can expect from the Prime brand. The design is in line with the recently restyled terminal, which also features the unique BMW Business Center. Menus are prepared by leading chefs and maîtres pâtisseries and cover everything from full meals to quick snacks, customized menus and last-minute catering request. The offering opens with a full choice of cured meats and cheeses DOP and IGP, and includes such regional specialties as the typical Milanese cutlet, lime rice pudding, Pizza Margherita with bufala cheese and Tiramisu made by chef Pedron. For the lovers of international cuisine, there are also Asian-inspired meals. So whether you’re dining in the terminal or at altitude, the quality and taste remains the same.

Meanwhile, in London, leading British Business Aviation caterer On Air Dining opened a new flight kitchen at Farnborough. The move followed the company’s 2016 acquisition of Emily’s Inflight Food Services. “This move allowed us to join up with the fantastic team at Farnborough and allowed us to bring together the expertise of both organizations and offer an outstanding food service to the growing number of business aircraft visiting London,” says On Air Managing Director Daniel Hulme.

On Air Dining has established an enviable reputation for its insistence on seamless service from the kitchen right through to the moment the passenger sees the meal in front of them. “Many caterers think their job is done when the boxes of food are handed over at the cabin door,” says Hulme. “However, we are able to take this to the next stage and give cabin crews the training and a foolproof system to ensure our dishes are up to the standard you would experience in any exclusive restaurant.”

So successful is the On Air system that major airlines pester Hulme for their secrets, “but we're not giving those away!” he says. Part of the success might come from the free culinary courses for cabin crews and Business Aviation management that the company runs from its Stansted base. “We are delighted to do this because I need their feedback as much as they need mine,” explains Hulme. While there, visitors can also visit the On Air Dining’s interiors showroom, where a large range of china, glass and flatware is on display, giving crew new ideas for a new luxury touch to the aircraft galley.

On Air Dining’s expertise in food handling and maintaining the flavor of their products also extends to the wines served on board. “You would be amazed how the frequent pressure changes on an aircraft can ruin a fine bottle of wine,” says Hulme. “A good tip is only to take the wine you know you will use on that trip.”

... and Well Rested

Besides keeping the passengers and crew well fed, FBOs also have to ensure that everyone remains comfortable and well-rested while at the FBO. TAG Farnborough Airport likes to brand itself as ‘more than an FBO’, and when it comes to relaxation areas for passengers and crew, the company excels.

As the UK’s only dedicated Business Aviation airport, TAG Farnborough has always had a strategy of staying one step ahead of the market and being ready to meet changing passenger demands. And this is exactly the type of proactive thinking behind the company’s recent
GBP 1 million investment in a new terminal building and crew facilities.

In 2015, air traffic movement growth was at 2%, including a 6% increase in the number of airliner-derived business jets, which represent the highest number in this category for any year. More so, many of these aircraft operate to and from the US, Middle East and Asia, often times arriving with a large group of passengers. “The original facilities at TAG Farnborough were built to serve a very different market, one where the majority of arriving jets carried two to three passengers,” says TAG Farnborough Airport CEO Brandon O’Reilly. “To be able to adequately handle this trend of bigger planes with more passengers, we needed more space.”

The result is the company’s state-of-the-art passenger lounge capable of accommodating up to 80 passengers. Located on the first floor of the terminal building, the new facility was designed to create a homely atmosphere, using oak wood furniture and velvet material cushions in contrast to the modern, colorful interior design found on the terminal’s ground floor. Customers can also take in views of the airfield from a gallery seating area while enjoying a freshly brewed “TopBrewer” coffee that can be operated via a provided iPad.

In addition to the lounge, the investment also includes additional crew facilities, including a quiet lounge and snooze room equipped with flat beds and a zero-gravity ergonomic chair. A popular feature is the complimentary gymnasium and shower facilities located in a building just adjacent to the main terminal. “I often say that we’re the airport that likes to say yes,” says O’Reilly. “So when crew asked for workout facilities, we delivered.” There’s also the 169-room, five-star Aviator Hotel. The hotel is located on the airport’s perimeter, making it a convenient choice for overnight crew stops and, offers a top-quality restaurant, meeting rooms and a gym.

TAG Farnborough Airport is proud of being voted Best European FBO for 11 years running. On this point, O’Reilly is quick to stress that, thanks to its Quiet Flying Program, the airport has experienced the lowest level of local resident complaints ever and has maintained its enviable environmental record. The company also gets kudos for space. “Although we have more than 40 business jets permanently based here, we have plenty of available space for more in the six hangars we added in the lead up to the 2012 London Olympics,” says O’Reilly.

It All Comes Down to Service and Support

In the end, maybe the takeaway here isn’t that bigger is always better, but that it all really comes down to quality and breadth of services available. And while you may think that price is the main driving factor – you would be wrong. In numerous surveys and studies, the guy with the higher price frequently has the higher market share on a field based solely on the way customers are treated, received and dispatched from a favorite FBO.

Add to this that many single or smaller chain type FBOs have a charm and look that is unique – as opposed to the cookie cutter similarity of the bigger groups. This too can be a part of the overall enjoyment of the private aviation experience. What they may lack in funding to build big glass and gold-plated facilities that measure in the high thousands of square feet, they make up for with the uniqueness of their bricks and mortar and the special way they build relationships and service with the clients.

At the end of the day, it really comes down to personal taste and convenience of location. With the prevalence of fuel programs and other support products on the market today, pricing is less and less of an issue. After all, every FBO seems to accept just about all the various options.

So again, it is what you want and how you wish to be serviced personally – or who your passengers choose – that often answers the question of which FBO to use. To back this up, just look at the various customer surveys that take place each year. Most of the leaders get there not based on size, but on the service and support they provide.
CEO has an ASAP trip change?

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Spurred on by innovation happening in the charter sector, flight planning is going digital and providing the industry with an array of integrated new service options. Nick Klenske reports

According to WINGX Advance Managing Director Richard Koe, Business Aviation has really struggled to re-emerge from the recession. “For almost a decade now, as new jet deliveries atrophy and flight activity flatlines, the industry has seemed short of ideas,” he says. “Surveys suggest it’s failed to get the luxury monkey off its back, with much of its target audience either ignorant of the product or unwilling to be associated with its often-toxic image.”

Although a lot of the industry’s misfortune can be explained by the anemic economic growth in its core markets, some of the industry’s problems are of its own making. This is particularly true when it comes to the access it provides to those wanting to charter business jets or do their own flight planning. “The customer experience is poor, the options are opaque, and the products are inconsistent,” says Koe. “It seems positively luddite that in 2017 customers still get put on hold for hours while brokers take painstaking negotiations offline in order to find an operator to meet the required schedule.”

In short, Business Aviation has contrived to be perhaps the very last service sector not to share an online market place with its customers. But things are starting to change. Although the digitization of Business Aviation has been driven by the charter sector, other sectors are quickly following its lead. For example, as many booking platforms are looking to become ‘one-stop-apps’, they are incorporating other digital services – including trip planning. “As the booking platforms are getting smarter, virtually consolidating the market’s fragmented inventory, they are patching into scheduling and trip planning platforms – many of which are also being digitized,” says Koe.

As a result, many traditional trip planning companies – along with a few new ones – are starting to go digital. Here BART takes a look at both.

One Marketplace to Rule them All

Billing itself as offering ‘everything a pilot needs in one easy to use service’, RocketRoute offers an array of innovative, smart technologies for flight planning, fuel and concierge services. “Private and commercial pilots, airlines, business operators, as well as HEMS and SAR operators, all use RocketRoute for flight planning, quick file, autoroute, fuel and ground handling request, concierge and trip support,” says RocketRoute Co-Founder Kurt Lyall. “The principle of fast, easy-to-use, direct access is the heart of RocketRoute’s success.”

RocketRoute works worldwide on any device and brings together into one system everything the individual pilot or flight department needs to operate an aircraft and to connect directly with service suppliers on the ground – including Air BP. Air BP’s RocketRoute Fuel App gives users online access to Air BP’s global network of aviation fuel locations.
Furthermore, a simplified and convenient payment system allows users to pay through either Air BP’s Sterling Card or via regular credit cards. In a first for fuel apps, the application also features the functionality to offset carbon emissions through the system interface.

As of EBACE, the app saw a significant update, taking its service offering well beyond fuel and flight planning. “The updated RocketRoute app brings together everything in a single integrated service, making it easier for the pilot to communicate with their preferred service providers,” says Lyall. “Not only do we liberate the pilot to focus on flying, we also provide solutions for those trip planning issues that pilots and operators have identified as being the most problematic and time-consuming.”

The updated RocketRoute app offers a complete digital one-stop-shop. Pilots can connect directly with thousands of ground handlers, FBOs and aviation providers worldwide. Customers can easily source and view any service provider at a particular airport. Users then simply select the services they require and complete their order.

“We identified the synergy with RocketRoute right from the outset as we set out to explore how we could work together to offer a wider range of services beyond fuel pre-ordering and purchasing,” says Air BP General Aviation Global Marketing Director Irene Lores. “We are well placed to respond to market demand among pilots and corporate flight departments to hold all the information they need for their flights in one place.”

As to its integration with online charter booking companies, in November 2017 RocketRoute announced a strategic global partnership agreement with on-demand jet charter marketplace leader Victor. According to a company media release, the companies, both driven by innovative and smart technology, will work closely together exploring synergies of process and service to more fully enhance the day-to-day performance of general aviation operators.

“Both companies have an impressive track record for digital innovation,” says Victor Founder and CEO Clive Jackson. “By pooling our knowledge and resources, I’m confident we can deliver fresh efficiencies for operators and an exciting step-change for the wider industry.”

The agreement follows Victor’s successful closing of a $20 million investment round led by BP Ventures, the investment arm of global energy company BP. With the new investment, Victor plans to further develop its unique, data-driven ecosystem into a new transactional B2B marketplace connecting suppliers, re-sellers and other flight planning and aviation fuel providers. Victor’s agreement with RocketRoute complements this strategy and allows both businesses to collaborate on delivering compelling digital solutions for operators spanning integrated charter sales, bookings, flight ops management and trip support across a wide range of missions.

In addition to fuel providers and charter companies, RocketRoute is integrating with a number of other service providers – all with the aim of providing a truly integrated, one-stop-shop for bizav flight planning. For example, last fall Air Culinaire Worldwide and Universal Private Transport announced their integration with the RocketRoute Marketplace. With this new fusion of technology, users can seamlessly place catering orders and hire ground transportation with the click of a button.

“In welcoming Air Culinaire Worldwide and Universal Private Transport to the marketplace, we are able to offer pilots and aircraft operators access to these premium brands and their services via our digital platform that is revolutionizing the way services are sourced and ordered,” says RocketRoute Vice President of Sales and Vendor Relations Steve Woods. “With additions like this, we are making it easier and easier for customers to connect directly with their preferred suppliers, order services and simplify their operations.”
As of October 2017, the RocketRoute Marketplace includes:

- 1,200+ fuel locations (including Avfuel)
- 24,902 handler & FBO locations
- 10,000 transportation locations
- 1,400 catering locations
- Security briefings for more than 20,000 airports
- Permits for 58 popular countries

At EBACE last year, the company launched an iPhone version of the platform, giving users a third option in addition to the iPad app and online versions. “The iPhone app version of uvGO is a continuation of our commitment to evolving our technology solutions to work the way our clients work, reducing their risk and stress,” adds Groeschel.

With uvGO for iPhone, users have a very similar look and feel to what they already have in the online and iPad versions. They can access critical trip information and such capa-

From ‘Brick and Mortar’ to Online and Apps

But it’s not just start-ups that are taking digital trip planning by storm. Companies like Universal Weather and Aviation, Rockwell Collins, World Fuel Services and Jeppesen all have their own digital platforms too.

Universal’s uvGO online allows operators to plan, build and manage missions worldwide. “Since we launched uvGO, we’ve received tremendous feedback and suggestions from our clients, which we continue to integrate,” says Universal Weather and Aviation Vice President, Global Product Strategy Guido Groeschel. “Usage and adoption have exceeded our expectations.”

With uvGO, users can:

- Create and manage single- and multi-leg trips from one convenient view
- Calculate and file flight plans
- View routes and weather on an interactive map
- Receive automatic alerts for potential issues impacting your planned trips
- Access information on permits, fuel, airports, FBOs, and even restaurants

uvGo is available for any operator that either works with Universal Trip Support Services, carries the UVair Fueling Card or has a Universal DIY online flight planning subscription with or without SD’s FlightDeck Freedom datalink added.
Rockwell Collins is also moving in the digital direction with its ARINCDirect Flight Manager. The service brings together all relevant pre- and post-trip international planning features and capabilities into one online location or app. Working seamlessly with dispatch and scheduling software, ARINCDirect Flight Manager provides planners, dispatchers and flight crews with up-to-the-minute information on everything that will affect a flight anywhere in the world. From storms over the North Sea to fuel shortages in Peru, ATC strikes in France or runway closures in the US – everything is available in a single location, including:

- Trip tracking through several formats – calendar view, folder view, global view and advanced search features
- Instant access to status of trip permits, handling notes, fuel releases, hotel confirmations, weather and flight plans
- Carbon emissions monitoring and tracking
- Fuel pricing by location and online fuel ordering
- Easy access to ARINCDirect card statements, invoices and budget reports
- Aviation tools that include airport locator, time and distance calculator, alternate airports and Fuel Stop Analyzer
- Database of travelers, documents and flight histories

One of the most popular ways of accessing the service is via the ARINCDirect iPad app. Using the app, flight plans completed on the ground are automatically synchronized for convenient use. Users also have access to the most recent, up-to-date weather information and flight plans. All company documents are fully integrated with an enhanced PDF viewer, and all annotations to charts or flight plans are instantly shared with your co-pilot or dispatcher.

On top of all this, users also have access to such critical safety tools as weight and balance, which is available offline. “We continue to release new versions of the app packed with new functionality and updates based on customer feedback,” says Rockwell Collins Vice President for Business Aviation Information Management Services Dave Poltorak. “Our promise is that we will always adapt to the latest technologies to ensure you continue to receive the highest level of support on your device.”

Likewise, World Fuel Services (WFS) launched its own integrated flight planning app for the iPad last fall. The innovative iOS app includes many features, including profile weather mapping, a journey log and an itinerary planner. “From the beginning, our mission with this app was to merge our flight planning design with the best of the best in our industry and, as a result, maximize efficiency and accuracy,” says WFS Vice President of Global Trip Support Jeff Briand. “Pilots can access valuable runway analysis and weight and balance information right inside this one flight planning tool, making it possible to recalculate and update data without the need to switch from app to app.”

For WFS customers, the app provides free access to full planning information for each airport, including NOTAMS, handlers, slot requirements and approach charts. Clients can also request fuel quotes and other flight planning services.

At EBACE last year, Jeppesen introduced key enhancements to Jeppesen Operator, a new online Business Aviation platform that integrates bizav functionality into a ‘one-stop-shop’ self-service environment. Available for pilots and operations staff through the cloud, a new iOS-based companion mobile app for Operator, called Personal Assistant, allows flight crews to access essential operator data and capabilities on the go. Specifically, Operator integrates all flight planning, runway performance, weight and balance, crew and fleet scheduling and management, self-service trip planning, reporting, customer account management, real-time pricing and cost accounting capabilities.

“Developed through years of research and built with proven software, we understand customer-driven requirements and have created Jeppesen Operator as the next generation Business Aviation tool to unify operations,” says Jeppesen Chief Operating Officer Ken Sain. “All-encompassing operations optimization provided through the tool enables operators to utilize their resources to a degree never before possible – all backed by Jeppesen’s renowned, 24/7 global customer service.”
Jet Aviation officially broke ground on the construction of its new widebody hangar at the EuroAirport Basel – Mulhouse. The large project, which expands the completions capacity of Jet Aviation’s largest facility, is on a tight schedule – with its opening planned for the end of 2018.

Volker K. Thomalla writes

To launch the start of construction on a new widebody hangar at its Basel facility, Jet Aviation recently held an official groundbreaking ceremony. “Jet Aviation has a long history of handling major modifications and completions, and we are fully committed to investing in the latest technologies that support the highest quality and safety standards for our customers worldwide,” said Jet Aviation Group President Rob Smith, who spoke at the ceremony. “This investment reinforces our commitment to Basel – our home base.”

Members of the Jet Aviation management team were joined by regional and local dignitaries, who jointly signed a commemorative certificate that was placed in a metal tube and put into the building’s foundation. Elie Zelouf, Jet Aviation’s first and longest-serving employee, poured concrete on the time capsule to preserve it for as long as the hangar stands.

Replacing numbers three and four, the new facility will be given the symbolic designation of Hangar 34. With 4,550 square meters (48,975 sq ft) of hangar space and 2,000 square meters (21,500 sq ft) of shop and office space, 34 will be well positioned to not only handle widebody completions projects – up to a Boeing 747-8 – but also provide enough space to simultaneously handle wide- and narrow-body aircraft.

“This significant investment in new infrastructure is a clear demonstration of Jet Aviation’s commitment to meeting customer needs around the world,” added Basel General Manager and Senior Vice President of Completions Neil Boyle. “It enables us to be more flexible in scheduling current and future workloads to satisfy the expectations of our clients.”

The hangar’s height was defined by the runway obstacle clearance of the airport’s 08/26 runway, which is located just south of the Jet Aviation site. Originally, the company intended the building to be high enough to house an Airbus A380, but the obstacle clearance limits forced the designers to go back to the drawing board. Despite this hiccup, it took Jet Aviation’s Real Estate team just two years of planning, negotiating and preparing before construction started in August.

In addition to the hangar, the project also includes an expansion of Jet Aviation’s apron. The company will extend its existing tarmac by 5,000 square meters (53,800 sq ft) to facilitate aircraft movements and parking.

Due to the size of the expansion project, Jet Aviation had to make careful plans to avoid any disruption to its ongoing services during construction. For this reason, the company leased additional space in neighboring hangars and built special pathways to ensure employees have proper access to all of the company’s many facilities. “Integrating a large complex project such as this into an existing operation could not have been done without exceptional teamwork,” said Jet Aviation Director of Real Estate, Facility Management and Security EMEA and Asia Sylvain Von Hof. “On behalf of Jet Aviation, I’d like to thank you – all our partners – for your much-appreciated efforts and support in helping us make this expansion a reality.”
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THE ILLUSION OF SAFETY

Behind all the certificates and routine audits comes the cold hard reality; safety oversight in civil aviation can cost lives.

Michael R. Grüninger and Capt. Carl C. Norgren explain it through the ExecuFlight accident

Due Diligence

The customers performed a thorough due diligence process. They asked the right questions and demanded safety certificates from the operators before selecting the supplier of the next charter flights. They wanted their executives to be transported safely.

ExecuFlight had an impeccable safety track record and could provide numerous documents to prove the safety of their operations. The FAA had certificated ExecuFlight as a FAR-135 operator. The operator’s safety assurance and compliance monitoring departments did not detect any safety and compliance problems. Industry audit organizations, in this case Wyvern and Argus, had audited the operator and had awarded them the sought after certificates, confirming that the company met the applicable industry safety standards.

The illusion of safety was perfect. The customer felt absolutely confident that ExecuFlight was the right operator to hire.

Reality Strikes

But behind the illusion of safety, the reality was very different from the shiny certificates and awards. The accident report reads: “On Nov. 10, 2015, about 1453 eastern standard time (EST), a British Aerospace HS 125-700A (Hawker 700A), N237WR, departed controlled flight while on a non-precision localizer approach to runway 25 at Akron Fulton International Airport (AKR) and impacted a four-unit apartment building in Akron, Ohio. The captain, first officer, and seven passengers died; no one on the ground was injured. The airplane was destroyed by impact forces and postcrash fire.”

The crash was the end of a long sequence of events that began long before the customers on board ExecuFlight 1526 decided to charter the aircraft in November 2015. The actions of the crew of flight 1526 were the result of a company culture that was conductive to unsafe flight operations.

The Hawker 700A was descending with a high rate of descent in full flap configuration and gear down. Due to slower traffic ahead the co-pilot, who was pilot flying, had slowed down the aircraft to below Vref. He had started descent too late and was trying to salvage the approach by descending with 2000 ft/min. The ceiling and visibility were just on the minimum required for the non-precision localizer approach for runway 25 at Akron (AKR). The captain, who was pilot non-flying, pointed out the low speed and the high rate of descent repeatedly during the approach, but did not intervene.

After passing the minimum, which was not called out by either pilot, the captain called ‘ground’ and then instructed the copilot to level off. The stick shaker activated, the GPWS issued a ‘pull-up command and shortly thereafter the aircraft impacted the ground. Nobody on board survived the impact.

Telltale Signs in Hindsight

Another unstabilized approach ended in a fatal crash. Despite numerous similar accidents in the past and numerous safety recommendations yet another crash occurred under similar circumstances and for similar reasons.

The accident report highlights many telltale signs which could have been detected by the operator, the FAA and the teams auditing the operator according to clearly defined industry standards.

The obvious cause of the crash was that the pilots had mismanaged the
approach. But this is only the superficial causality. The root causes of why the pilots mishandled the approach lie much deeper.

During the investigation, it became evident to the NTSB that managers, supervisors, FAA inspectors and industry auditors had not detected or correctly interpreted the lead safety indicators such as poor management, superficial pilot selection, lack of supervision, minimal oversight and complacent auditing.

**Serious Lack of Management and Supervision**

Management and supervision of flight, ground, maintenance and training operations are the responsibility of the operator. Numerous deficiencies in the oversight were detected during the investigation.

During the recruitment of the pilots basic background checks were not carried out which would have indicated deficiencies in the flying skills. ExecuFlight had outsourced its training. But the operator supervised the standards of training provided by the third party training organization poorly.

The operational control of flights was formally the responsibility of the president of the operator. But in reality only departure and arrival messages were monitored. Flight planning, fuel planning, selection of alternates etc. were performed by the operating crew without supervision.

The adherence to standard operating procedures during line operations was poorly monitored. The company did not have any monitoring of line operations in place.

There was no formal way to report safety relevant occurrences to the management. Hence no feedback mechanism existed except for contacting the head of flight operations directly.

The president and the head of flight operations even scheduled flights which caused minimum rest time and maximum flight time regulations to be violated.

The president and the head of flight operations, who both have important roles as role models for the employees and pilots, ignored basic regulations designed to keep passengers safe. Their behavior was copied by the other pilots and became the norms and standards to which the pilot group operated.

The lack of performance of the flight crew of ExecuFlight 1526 were the result of the adverse role models and the low expectations set by the senior management team as well as the lack of effective monitoring mechanisms in daily flight operations. Corporate complacency towards the precursors of poor performance seriously endanger flight safety.

ExecuFlight had not implemented a Safety Management System (SMS). Today, most operators have implemented an SMS. And yet, developing effective safety performance indicators is often hindered by SMS practices. A recent study published in the “Aviation Psychology and Applied Human Factors” Journal (Volume 7/Number 2/2017) concludes that “the main factors in the less-than-optimal functioning of an SMS may be: the role of top management, the lack of safety culture, and the effectiveness of the data collection approach, either individually or in combination”.

The importance of this statement cannot be overemphasized. It implies that although operators may have implemented an SMS, their ability of actually foreseeing weak points in their safety performance is not developed. The SMS remains blind and does not provide solid
safety data to trigger appropriate and effective decisions by management. The study continues in pointing out that “the knowledge of these impeding factors may help organizations to improve their safety performance indicators and the success of their SMS”.

One aspect particularly relevant to this accident and to the operator of the accident aircraft is the lack of a robust safety culture. In a robust safety culture employees know what constitutes acceptable and unacceptable behavior. The study states: “Because it was not clear for them what the organization and juridical authority considers as being acceptable and unacceptable, they were reluctant to report their actions for fear of prosecution. As a result, occurrences that should have been investigated to find out what happened, why it happened, and how to prevent it from happening again now go unnoticed.”

Without feedback from front-line employees, the SMS is blind, and management cannot take the decisions to implement appropriate actions. At ExecuFlight the lack of feedback was exacerbated by the lack of positive and consistent role models. Even worse, the role models themselves did not adhere to the procedures they had laid down in the company operating manuals. When the codified rules of acceptable behavior in practice are not followed by those who established such rules, employees get confused and will not buy into a culture of safe behavior.

Although it sounds quite abstract and theoretical, it is not an academic matter. With the advent of formalized SMS, a true shift in paradigm has started in the aviation industry. While previously each employee, pilot, engineer, manager and so on acted to take care of their own little ‘kingdom’, safety culture today requires all personnel at all levels to work together in a clear and transparent way. Nobody may hide shortcomings and everybody should feel protected by a solid and trusted no-blame culture for reporting. The industry still has a long way ahead to fill this new paradigm with life.

Serious Lack of Oversight
Oversight is the responsibility of the Aviation Authority and, in an extended way, also industry audit organizations.

In the past, one of the authors of this article was directly involved in state oversight of visiting aircraft. This program is known today as SAFA. One day, an Egyptian charter operator appeared on the oversight radar of Switzerland’s SAFA inspectors. Flash Airlines operated leisure flights from Europe to Egypt. The inspection of the Boeing 737 and crew of Flash airlines revealed numerous anomalies. When analyzed individually, each anomaly was either barely within limitations or slightly outside. All snags could be fixed without major difficulties on the spot in Zurich prior to departure. But when analyzing the sum of anomalies within the context of overall operations, the picture was not right. Given the certification status of Flash Airlines, the inspectors could have opted to trust the certification status and to give in to the illusion of safety. After considering the full picture, the inspectors decided to prohibit further flights to Switzerland. At the time, and especially from a legal point of view, it was a courageous and unorthodox decision to take. On January 3, 2004, Flash Airlines Flight 604 crashed departing from Sharm-el-Sheikh killing all occupants. With hindsight, the decision to prohibit flight operations was proven correct. Oversight is a serious business. It is indeed possible to detect unsafe conditions prior to an event “proving” that the conditions were unsafe. A correct risk assessment requires the courage to see the reality in its context as it is, not as one might want to believe it should be.

This example highlights how difficult it is for authority inspectors to react in a timely and decisive manner. Commercial, legal and political considerations easily counteract risk perception. Only a vigilant and outspoken risk perception as well as mitigating action based on perceived risks can counteract the illusion of safety and break a tragic chain of events.

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Circling to a land after breaking out from an instrument letdown to a different runway would seem to a logical way to conclude a flight. If the approach happens to not be aligned with the active runway in use, why not fly around the airport to the correct one? After all, we were all taught to land on the runway most favored by the wind conditions, and to conform to the prevailing flow of traffic in the absence of ATC instructions.

However, as we moved into larger and faster airplanes, we also learned the importance of a stabilized flight condition during the final stages of a landing approach. Nothing could be more destabilizing than pulling up from a descent into level flight, executing multiple turns to realign with a different runway, and reentering the descent. That takes some pretty fancy airmanship, particularly in a heavy drag-laden airplane.

And so, given a lengthy runway and a light tailwind component, it might be wiser to land downwind, rather than assume the risks of pylon-racing around the airport perimeter. This judgment call should be made only with the advice and counsel of an ops manual that sets strict limits on tailwind factor, based on the aircraft’s performance charts.

When then, is it safe and advisable to perform a circle-to-land? Any location-specific limitations regarding the maneuver, of course, are shown on the chart for the approach procedure. Sometimes circling is prohibited in certain sectors, owing to obstructions or noise abatement for housing in that direction. The required ceiling and visibility to circle are shown in the minimums table, but most operators will wisely insist on additional prerequisites. The minimums in the circling column are just that – minimums – and were written to provide flexibility for most-favorable situations. The original standards for circling approaches began with one mile of visibility and 500 feet of ceiling; even the increased minimums for approach Category D, often two miles and 600 feet, are not enough for comfortable circling.

More Than Just Published Minimums

If operators are to allow circling approaches at all, it should be under good day-VMC conditions, perhaps in weather equal or better than ATC’s 1000-and-three requirements for issuing clearances to make a visual approach. Many approach plates call for increasing only the visibility factor to permit circling in faster airplanes, but not the required ceiling. Flying a heavy jet in turning flight under a low ceiling is hardly advisable; an SOP for flying a traffic pattern at 1,500 feet AGL would seem to be equally applicable for the circle-to-land maneuver. Maintaining such an altitude will require three miles or more of visibility, in order to arrive at a stabilized final approach. Bear in mind that reported ground visibility is sometimes more optimistic than actual flight visibility.

I would never be comfortable with circling to land under low weather at night. The limited visual cues of nighttime conditions encourage disorientation. Precipitation on the windshield, confusing lights, and lack of a visual horizon, all contribute to the hazard of circling to land in the dark. Don’t do it unless you’re at a familiar, well-lit home base airport.

Simulator training is quite valuable when preparing for the circle-to-land maneuver. Have the sim instructor...
begin with daytime visual scenery, then gradually introduce lower weather and fading visibility. In this way, your airplane’s suitability for low-altitude tactics becomes evident without the risk of experiencing it in actual flight. Establish limits for your operation that will maintain an appropriate level of safety.

Aircraft types differ in their ability to perform when low and slow. A straight-wing Citation is fairly forgiving, while a swept-wing airplane might require a deft touch. It’s tempting to increase airspeed to avoid the risk of a stall during turning flight, but if you’re trying to stay in C category rather than D, you may opt to hold the speed down. Don’t focus too strongly on restricting speed; I’d rather fly a faster, wider circle as long as the weather and terrain permits it, allowing time for re-stabilizing after rolling out on final. What you might have to do to pass a checkride in the simulator is one thing, but keeping more margin in actual operation is a good option.

Keeping It Safe

When published circling minimums are established, a safety zone is drawn from the runway end to make sure the 1.5 or 2 nautical mile semicircle around the target pavement is free of obstructions reaching up to within 300 feet of the minimum altitude. If you stray outside that zone (which has a bit of safety margin, but only a bit), you’re responsible for obstacle clearance. Therefore, in training we insist on maintaining bank angles and speed restrictions that will keep the aircraft inside the circling airspace. Again, if you fly wider, know what you’re doing; carried to extreme, you’re on a visual approach to land, not a circle-to-land maneuver.

Do not begin the descent from the minimum circling altitude, or your self-imposed 1,500-foot AGL pattern, until you’re in a position to make a “normal” landing approach. I would take this to mean a base-leg position or later, above the VASI lights’ on-glidepath indication, at which point you’re becoming stabilized and transitioning from approach flaps to landing flaps setting. Making these changes at low altitude is part of the risk of circling to land, and that risk should be included in your decision about whether to attempt the maneuver.

Some operators adhere to an SOP that does not permit circling to land, other than as part of an arrival involving a visual approach, and that is a valid restriction to apply, in the interest of safety. If you do choose to maintain the flexibility of accepting circling approaches, be sure to practice for them and avoid the hazards associated with such a maneuver.

Breaking Out Late

You may not plan to circle, but you may wind up acquiring the airport environment at the last second, too late to effect a normal descent to the runway. The most logical means of getting on the ground, rather than pulling up for the missed approach, is to maneuver to a downwind leg, fly a circling base-to-final turn, and enter an approach to the opposite end of the runway.

This will involve walking the precise line between a too-close pattern, using a steep-banked turn just to keep the runway in sight, or flying a wide sweep, which avoids the danger of a steep bank at low altitude, but results in exceeding the obstacle-free zone around the runway end. Pay particular attention to maintaining altitude, and hold airspeed to the exact amount that keeps your aircraft in its approach category but avoids a stall.

A maximum bank-angle target of 30 degrees is the most appropriate choice for circling to land. The stalling speed increase generated by the slight increase in G-loading of a 30-degree bank is less than 10%. However, bear in mind that Vs with an approach flaps setting is probably greater than the benchmark Vs1 of landing configuration. Maintaining a
faster than necessary speed, on the other hand, increases the radius of the turn, perhaps into unprotected airspace, and risks losing sight of the airport in low visibility. With a two-pilot crew, one crewmember must remain “on the gauges” to monitor the pilot-flying’s adherence to safe altitude, bank and airspeed.

Getting Outa Here
Circling under low weather may result in unplanned encounters with low-IMC as you fly around the field. There is no time for vacillation in such a case. If you’re unable to maintain the published minimum altitude, or your SOP standards, pull up and fly the missed approach procedure. But, where do you go?

The MAP is not designed to cover all the possible scenarios resulting from flying a circle to land. You are responsible for obstacle clearance during the customized miss, so the safest procedure is to turn toward the airport while climbing out, joining the MAP heading as soon as possible. Air traffic control will be expecting you to show up on the published missed approach path from the original runway orientation. Talk to ATC expeditiously, but only after you have the airplane well in hand.

For all the many obvious reasons, a circle to land maneuver involves risk, and is not to be conducted lightly in high performance aircraft flying in approach category D. It combines a rapid sequence of instrument flying and low-visibility low-altitude visual hand flying. While it remains an option, for many business-flying operators circling to land must be restricted to daytime use in weather adequate for a visual traffic pattern. Be aware that, as you increase your weather standards, you could encounter VFR traffic under the ceiling.

Should you circle to land? Thanks to the preponderance of space-based RNAV straight-in approaches, circling to land is no longer a routine outcome to an instrument approach. Because it is increasingly rare, its use requires care and planning. Sometimes there’s no other option when landing at an outlying airfield with limited approaches. But keep your operating standards high; published minimums to circle are just that – MINIMUMS.

**A Circle To Land Gone Wrong**

On 28 February, 1966, two Northrop T-38 jet trainers, operated by the U.S.’s NASA space agency, were flying from Houston, Texas to St. Louis, Missouri, carrying four astronauts. The weather at St. Louis was poor, with 500 to 600 feet of ceiling and two miles of visibility in fog, rain and snow.

Using a localizer approach to runway 24, the lead T-38 broke out of the weather too high and fast for a straight-in landing, so the pilot opted to enter a tight turn under the weather to circle the airport for another attempt. The number-two aircraft executed a missed approach. Unfortunately, the circling airplane was unable to hold altitude in the steep bank, despite applying afterburner power, and struck the top of a building with one wing, careening into a parking lot. Both astronauts were killed.

The lesson learned in this tragic accident is that high-performance aircraft must be flown precisely on a stabilized landing approach. Circling to land requires extra care in marginal weather conditions, if it is to be attempted at all.
n 1922, Norwegian meteorologist Jacob Bjerknes, in a paper published with Halvor Solberg, initially postulated the dynamics of the polar front and its ability to cause north-south heat transport in the atmosphere. Earlier, his father, Vilhelm Bjerknes, had founded the University of Bergen’s Geophysical Institute, where the idea of frontal zones between air masses originated. These “fronts” were so named because of the recent conflict between armies in World War I. This struggle for dominance between advancing and resisting types of air masses, each with differing characteristics, was reminiscent of earthbound battles for supremacy. Thus was born the Norwegian cyclone model, describing the life cycle of mid-latitude weather circulation in weather theory.

As pilots, we live with the weather on a daily basis. And we encounter weather fronts as a normal course of doing business. But what is a front, and how is knowing about it going to help us cope with the vagaries of flying weather? The front is simply the boundary region where two differing air masses meet. Therefore, it’s important to first understand air masses and their characteristics. As first classified by Swedish meteorologist Tor Bergeron, an air mass is either continental or maritime in its moisture property; that is, dry or moist, respectively denoted by a “c” or “m” prefix in lower case. A subsequent upper-case letter denotes its source region; A is for arctic or antarctic, P stands for polar (originating not from the poles but from the slightly warmer side of the Arctic or Antarctic Front), and T means tropic (originating on the warmer side of the Polar Front). Other designations used are M for monsoon and E for equatorial. A lower-case “k” suffix signifies air that is colder than the surface below it, and a “w” suffix denotes an air mass that’s warmer than the surface below. This interaction of the surface temperature influences the stability of the overlying air mass.

Much of the weather we are interested in, from an aviation standpoint, can be found in the frontal zone between these air masses, and the type of weather we encounter is determined by the characteristics of each air mass. While we’re trained to look for “highs” and “lows” on the weather map, generally thinking in terms of “high is good weather, low is bad weather”, such pressure features are but the circulation centers. The fronts are where the action is.

Woe to us who must take off or land in the vicinity of a frontal boundary, especially if it’s close to the anchoring center of low pressure. In such a case, it would be wise to have a diversion plan, maintaining alternate airports in a direction where the weather is likely to be more stable. Forecasts are based on expectation of air mass, or frontal, movement, and not always will the fronts follow the plan. They can pick up speed, arriving in advance of forecast, or slow down and stagnate, forestalling clearing. Our job is to continually verify the weather we were given before takeoff, by the best in-cockpit means we have available.

What Kind of Front Is It?
The classic weather fronts are the cold front, in which cooler air is advancing into a warmer air mass, and the warm front, during which warmer air is moving into a cold air mass. Note that we don’t say a “hot front”, just a warm front; because cold air is denser, a warm air mass has a difficult time displacing cold air, more typically riding up over it while leaving a vestige of heavy cold air at the surface. So, while we might think of a cold front as the more active “snowplow” shoving its way across the landscape, its influence on our flight activity may be short-lived as we speed through it. The warm front, on the other hand, can spread out over an entire country with widespread low clouds and precipitation. Good alternate airports may be hard to find.
Cold fronts, plotted on the weather map in blue with projecting “teeth” indicating the direction of movement into the warmer air, are the meanest villains, accompanied by billowing tall clouds, convective in nature because of the updrafts carried within, perhaps generating thunderstorms and squall lines ahead of the front itself. Such storms build and die quickly, moving along the front as they do so, in the direction of the winds aloft. The front’s movement, on the other hand, is more like a curving gate swinging around an anchoring low pressure center. The most violent conditions will usually be found near and ahead of the tightly-wound curve attached to the low. Holds and deviations may be necessary if thunderstorm weather is influencing your destination airport, perhaps blocking off arrival procedures and approaches or causing ATC to switch runways as outflow winds move around.

Warm fronts, shown in red on the chart with projecting rounded “bumps” in its direction of movement, can appear more benign from the standpoint of generating convective weather, but they fill the atmosphere with layers of stratus cloud, producing drizzle-type precipitation covering a large area, rather than localized downpours. Icing can be encountered as one proceeds into the cold air ahead of the warm front, and inversion layers can create freezing rain as supercooled water falls out of the warm air into the cold air near the ground. From a flying standpoint, expect to fly more approaches, to lower minima, in warm front conditions, with the concurrent delays from ATC as traffic backs up.

Either of these fronts can degenerate into a Stationary front, depicted by alternating directions of the “teeth” and “bumps” on the map, showing that neither air mass is winning the battle. The cold air’s “teeth” are projecting into the warm side of the front, and the warm air’s “bumps” point to the cold side. The zone of contention can sit immobile over an unlucky region for a day, or a few days, spreading misery and flight delays as pilots deal with precipitation and low weather. Hopefully, we can exit the region in a beneficial direction.

The Occluded front combines the worst features of both cold and warm fronts, and none of the benefits. An occlusion occurs when a faster-moving cold front overtakes a warm front, driving into it and either plowing under or riding upon it. There are three air masses involved; the cooler air originally being displaced by the warm front, the warmer air behind the warm front, and the second mass of cold air behind the cold front. Now, we have a set-up for thunderstorms in some spots, obscured by widespread stratus and warm-air drizzle, leaving pilots with less visual interpretation as they approach the zone. Expect anything; turbulent air, rain shafts, shifting winds, and mist and fog.

Modifiers

Of course, not every front is a classical-defined example. Most of the frontal weather we encounter is modified by local changes, caused by terrain, coastal moisture, daily heating and cooling, even industrial influence in populated areas. Temperature inversions stabilize the surface air, perhaps degrading visibility, and a sea breeze can add moisture to a coastal airport’s landing and takeoff situation. Massive airport-closing snow accumulation can result from a local moisture source as a front moves across a large lake or bay.

One can determine the actual penetration of a frontal zone by observing the heading required to stay on course. If the front is oriented in a north-south direction, a heading change to the right is called for when passing through the front, in order to maintain a desired track. In addition to a temperature change, a front is defined by a shift in wind direction; more northerly and westerly in the cold air, more southerly and less westerly in the warm air. Punching through, therefore, from the cold air mass into the warm air mass, with the front aligned north-south, means an eastbound pilot will need to reduce the crab angle being held to stay on track, by changing heading slightly to the right. A westbound pilot, on the other hand, will also find himself adjusting to add heading to the right as he goes through the front’s wind change. The change may be slight, but it is there, and visual signs of the change in air masses will also be detected. The warm air holds more moisture, reducing visibility, while the cold air has less water content, inhibiting haze and cloud layers.

The privilege of piloting aircraft in the world’s atmosphere allows us to see weather first-hand, and dealing with fronts between air masses is simply a part of adapting to the ever-changing airscape we will observe. The weather, and the environment in which we fly, is always moving and evolving – sometimes rapidly, sometimes frustratingly slow, but the fronts are always there to be dealt with.
The Middle East is characterized by vast space between its regional economic hubs – both within the region and itself and between the region and abroad. As a result, Business Aviation plays a vital role in keeping the region connected. In fact, Dubai – London is one of the Middle East’s Business Aviation fleet’s most frequently flown routes. More often than not, the jets making this trip and similar long-haul journeys are large cabin and long-range models – by far the region’s jets of choice.

It should therefore come as no surprise that Business Aviation’s showing at the Dubai Airshow was dominated by the manufacturers of bizliners and long-range aircraft. Among the handful of OEMs present at Dubai World Central Airport was Gulfstream Aerospace. The company, which has sold more than 170 aircraft to the region, exhibited its flagship G650ER, G550 and the Super Midsize G280 during the show.

Prior to the show, Gulfstream announced that both jets will offer users even better performance than originally promised. This is because during flight testing, the aircraft exceeded expectations and demonstrated capabilities beyond the company’s initial projections. Upon entry into service, the G600 will deliver 6,500 nautical miles/12,038 kilometers of range at Mach 0.85 – 300 nm/556 km farther than the initially promised range of 6,200 nm/11,482 km. At its high-speed cruise of Mach 0.90, the aircraft will fly 5,100 nm/9,445 km, an increase of 300 nm/556 km over original projections. The G500, which will be the first of the two aircraft to be certified, can fly 5,200 nm/9,630 km at its long-range cruise speed of Mach 0.85, providing operators greater mission flexibility over the aircraft’s original 5,000-nm/9,260-km range. At its high-speed cruise of Mach 0.90, the G500 will offer 4,400 nm/8,149 km of range, a 600-nm/1,111-km increase over its projected range of 3,800 nm/7,038 km.

“As we methodically moved through our concurrent flight-test programs, we recognized that we had both the time and ability to enhance the G500 and G600 performance and give our customers a business jet family that’s better than the one we had promised them,” says Gulfstream President Mark Burns.
Powered by two PW800 PurePower turbofans from Pratt & Whitney Canada, the G500 and G600 have a maximum operating speed of Mach 0.925. Certification for the G500 requires additional testing due to its enhanced performance and is anticipated in early 2018. Regardless, the company is keeping the customer delivery schedule as is, with deliveries are set for 2018. Meanwhile, the G600’s anticipated certification and service entry are slated for 2018.

Gulfstream’s presence at the show was somewhat limited by the absence of companies from Qatar. Regional tensions between the country and its neighbors prohibited any Qatari company from participating in the Dubai Airshow. Companies like Qatar Executive, which happens to be the global launch customer for both the G600 and G500, were noticeably absent.

Dassault Aviation is not only a major player in the region with its high-performance Mirage and Rafale fighter aircraft, but also with its family of Falcon Business Aircraft. The company used the show to highlight its new ultra-long range Falcon 8X business jet, as well as a new modernized version of the super versatile Falcon 900LX long range trijet. The 6,450 nm/11,945 km Falcon 8X has generated considerable excitement in the Middle East since the first aircraft was delivered to a Gulf customer earlier this year.

“We expect the Gulf region to play a big role in the success of our new flagship, which offers the best combination of range, cabin comfort and..."
operating efficiency of any business jet on the market,” says Dassault Aviation Chairman and CEO Eric Trappier. “We also anticipate heavy demand here for our upgraded Falcon 900LX model, with its re-designed cabin, contemporary styling, optimized sound proofing and the latest cabin systems – all of which make it the best buy in its category for years to come.”

The Middle East has traditionally been a key market for Falcon aircraft. The total number of Falcon jets in the region has nearly doubled to more than 70 aircraft over the past five years – and continues to grow despite a softness of the current market. The Falcon 8X, which can fly non-stop from New York to Dubai, Dubai to Adelaide, or Chicago to Jeddah and land at restricted airports like Gstaad and Lugano, Switzerland, will only further strengthen the company’s regional footprint. More so, the jet’s operational capability has been further reinforced with recent approvals to fly in severe crosswind conditions and to operate at London City Airport. A few key performance parameters, such as take-off distance and cabin noise, even surpassed design objectives for the big new trijet, which was derived from the Falcon 7X. And if that wasn’t enough, the 8X is even quieter than the 7X.

The aircraft’s spacious cabin – the longest of any Dassault Business Jet – can accommodate a wide variety of configurations. For example, one layout features a bathroom with a real shower, while another offers a VIP forward lounge that can be easily converted into a certified crew rest for very long flights – a configuration that is proving especially popular.

The Falcon 8X is certified to carry Dassault’s revolutionary FalconEye Combined Vision System, the first head up display (HUD) system in Business Aviation to combine synthetic and enhanced vision capabilities in a single view. According to the company, almost all Falcon 8X customers have signed up to use the new FalconEye HUD. Falcon 8X operators can also opt for a JetWave Ka-band Satcom system, which enables passengers to browse the internet, stream videos or videoconference anywhere in the world.

To serve its customers in the Middle East, Dassault operates an Authorized Service Center (ASC), a spares distribution center and a sales office in Dubai, and a technical office in Jeddah.

Brazilian manufacturer took the Dubai Airshow stage to announce the enhancement of the flight experience aboard its Legacy 450 and Legacy 500 mid-cabin business jets. Both jets feature a very low cabin altitude, which, according to Embraer, is already considered among the lowest on the market. A lower cabin altitude reduces the stress on the body during flight and makes a flight more comfortable than a flight at higher cabin altitude. It also reduces fatigue.

Embraer has now further reduced the maximum cabin altitude to a best-in-class 5,800 ft (1,768 m). The current maximum cabin altitude of both aircraft is 6,000 ft (1,828 m) when flying at 45,000 ft (13,716 m). The cabin pressurization differential was increased from 9.3 psi to 9.73 psi to reduce the maximum cabin altitude to 5,800 ft. The aircraft’s environmental control system also preserves a sea-

The company had a Legacy 500 on display in Dubai, which was joined by a Legacy 650E and a Lineage 1000E, which is the largest business aircraft in the manufacturer’s portfolio. “With our focus on value, the Legacy 450 and Legacy 500 are setting new standards for the midsize cabin segments,” says Embraer Executive Jets President and CEO Michael Amalfitano. “These aircraft are beautifully designed and brilliantly engineered and they will continue to elevate the experience that we provide our customers.”

Textron Aviation brought its largest certified business jet, the Cessna Citation Latitude, to Dubai, along with a Beechcraft King Air 350i and a Cessna Grand EX.
The company announced during the show that it has begun delivering 10 Cessna Grand Caravan EX turbo-props to Tuareg Aviation. The aircraft will provide charter, cargo and logistic services between a network of bush safari lodges in Botswana in southern Africa. “The Caravan continues to prove its incredible performance and reliability in challenging environments,” says Textron Aviation Vice President of Sales Africa Lannie O’Bannion.

At the next edition of the Dubai Airshow, in two years, expect Textron to make a big splash as it brings its Cessna Citation Longitude to the static. The Longitude is in its final stages of FAA-certification. Textron Aviation’s next new flagship, the Citation Hemisphere, which has just finished wind tunnel testing, is expected to fly in 2019. With its 4,500 nm range and three zone cabin, it will be a great aircraft for the Middle East.

**Services on Display**

Although business aircraft are an important – and often spotlight stealing – part of the business, one cannot overlook the equally important services and training – many of which were on display in Dubai. For example, Jet Aviation and the Al Mulla Business Group opened a new FBO at the shared VIP terminal in Dubai South. It will be operated as a joint-venture. Executives from Jet Aviation and the Al Mulla Business Group hosted a grand opening ceremony at the FBO during the show. “We are firmly committed to our customers in Dubai and the region, which our new Dubai South FBO demonstrates,” says Jet Aviation Dubai Vice President and General Manager Hardy Butschi. Jet Aviation will continue to serve its customers from its existing FBO at Dubai International Airport (DXB), which has been in operation since 2005.

During the show, Jetex Flight Support showcased plans to build a new aircraft hangar at the Jetex FBO Terminal near Al Maktoum International Airport in the Dubai South Aviation District. The fully-equipped hangar, which is set to be operational by 2019, will encompass 20,000 sq ft and feature air-conditioning in order to accommodate the parking and maintenance needs of all major types of aircraft. The facility further enhances the existing terminal, which was officially launched in 2016. It is the largest in the Jetex portfolio and the first in Dubai to be awarded the IS-BAH certification. It was also the official FBO of the Dubai Airshow 2017. “We are excited to announce this important step in the expansion of both our flagship Dubai facility and the spectrum of services offered by Jetex worldwide,” says Jetex CEO and President Adel Mardini. “The new hangar will allow us to deliver a complete range of trip support from one location, increasing convenience for clients and ensuring they receive maintenance services of the highest quality from a name they can trust.”

ExecuJet, which is part of the Luxaviation Group, celebrated the extension of its MRO offering in the Middle East during the show. The company gained approval to perform line and base maintenance on Embraer Phenom 100 light jets. Now operating two MRO facilities in Dubai, the company is now well positioned to support regional flight training academies who operate these entry-level aircraft types, as well as other customers who own a Phenom 100. “This latest approval from the UAE’s General Civil Aviation Authority has greatly enhanced the services that ExecuJet can provide for customers in the Middle East,” says ExecuJet Middle East Maintenance Director Nick Weber. “Our MRO facility at Dubai International Airport can now perform 4,800 hours/72 month checks on the aircraft, while at Al Maktoum International Airport we have the capacity to carry out a wide variety of operations, including defect rectification, engine and line-replaceable unit change and out of phase maintenance tasks.”

Even with this latest expansion, the company has no intentions of stopping. ExecuJet’s Middle East says it is looking to further expand its services to a local customer base in the region. The next step in the expansion will be finishing the construction work on their new location at Al Maktoum in time for the start of Expo 2020, which
one-on-one interview with CEO Omar Hosari).

**Emirates** opened its new Emirates Flight Training Academy’s (EFTA) during the airshow. Although it was originally scheduled to open early next year, the Airline Group decided to move the opening date up in order to meet the Dubai Airshow timeframe. Just days prior to the opening of the Dubai Airshow, EFTA’s first light jet arrived at the Academy’s facility at Dubai World Central Airport. Emirates has ordered five Embraer Phenom 100EV. Emirates pilots have ferried it from Florida via the traditional North Atlantic ferry route and via Germany, Hungary, Greece, Egypt and Saudi Arabia to the UAE. The Academy will use the Phenom 100EV for Advanced flight training, with EFTA cadets transitioning directly from the single engine Cirrus SR22 G6 to the light jet. The Academy’s approach eliminates an additional step in cadet training and provides the students with more experience on jet aircraft.

EFTA also used the show to sign an agreement with TRU Simulation + Training, a Textron company, to supply six new Flight Simulation Training Devices (FSTDs) with minioemotion systems for the Academy. The agreement was signed in the presence of His Highness Sheikh Ahmed bin Saeed Al Maktoum, Chairman and Chief Executive of Emirates Airline and Group, by Adel Al Redha, Emirates’ Executive Vice President and Chief Operations Officer and James Takats, Senior Vice President, Global Simulation and Training Strategy, Textron Inc. As launch customer, the Emirates Flight Training Academy will receive these six minioemotion flight simulation training devices, which are the first of their kind and mark a new product line and class of simulators for TRU. Not surprisingly, three of the devices will be configured as Cirrus SR22 G6 FNPT2 and three as Embraer Phenom 100EV FTD Level II/MCC.

**CAE** also maintained an impressive presence at the show and showed off its unrivalled expertise in training and simulation with its big announcements. CAE and Abu Dhabi Aviation Training Center (ADATC) have announced the launch of the new Embraer ERJ145 pilot training program with Falcon Aviation. Together, CAE and ADA will be delivering train-
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INTERVIEW

ONE-ON-ONE WITH OMAR HOSARI

As CEO of UAS International Trip Support, Omar Hosari’s vision and expertise have been central to the company’s growth from a handful of employees into a global network— all within just 15 years. By developing and implementing strategic goals and objectives, he has helped position UAS among the industry leaders, as well as solidifying his own reputation as a top aviation expert. BART Senior Editor Marc Grangier took the opportunity of NBAA/BACE 17 to sit down with Hosari to learn more.

What’s behind your motto “Your local partner with global reach”?

We brand ourselves as a “local partner” because we have over 250 operations employees located in 50 countries and a network of over 1,200 local handlers. At the same time, we also have a “global reach”. As a source provider who relies very little on third parties, we have completed nearly 1,000,000 operations across all continents.

Believing that UAS had something new to offer operators, our focus from 2000 to 2015 was to build an international footprint. As a result of this work, today our global network includes four continental headquarters in Houston, Johannesburg, Hong Kong and Dubai, plus regional offices in the emerging economic epicenters of Lagos, Nairobi, Beijing and New Delhi— not to mention a ground presence in 23 global locations. We are now a kind of “United Nations” for aviation as our international team of aviation experts is comprised of more than 50 nationalities speaking more than 42 languages and available 24/7 to provide seamless, end-to-end trip support, executive travel and charter solutions to the world’s most challenging destinations.

You mentioned that you want to extend your expertise to include the creation of game-changing technology. Any progress here?

We recently launched an innovative tech suite called UASevolution to respond to the exacting demands of the Business Aviation industry. The entire UASevolution suite is specifically designed to answer pilots and dispatchers calls for more powerful, mobile and user-friendly tools for planning and executing their missions. For example, the first component of the suite is UAS FlightEvolution, a powerful and intuitive flight planning and weather tool designed on a web and mobile platform.
We are currently working to complete the suite. Most recently, we developed UAS TMSevolution, a trip management system that gives our customers real-time access to mission-critical information about their trip support requests anytime, anywhere. It’s a web and mobile-based trip planning application that alerts them with instant notifications and updates on all aspects of solution requests made through UAS. This user-friendly application saves time and gives customers greater control over the status of their services – all free of charge. We firmly believe it’s now one of the most sophisticated and user-friendly operational tools on the market.

**What was behind the 2016 partnership with Deer Jet?**

Last year we concluded the acquisition of major shares of our company. We set up this strategic alliance because we thought it would substantially benefit our clients by improving our capabilities and accelerating strategic goals for enhancing international Business Aviation flights and the overall user experience. One year after the deal, we feel we made the right decision as UAS is now the flight support partner for the impressive fleet of 90 aircraft that Deer Jet manages and operates – a fleet that includes the world’s only BBJ 787 in VVIP configuration, “the Dream Jet.”

As you certainly know, Deer Jet operates as a wholly owned subsidiary of HNA Group, a Fortune 500 company. By joining the Deer Jet family, we will have more opportunities to, for example, serve the group’s airlines – which operate an impressive fleet totaling 1,300 commercial airliners – yes 1,300 aircraft!

This partnership was designed to facilitate both UAS’ and Deer Jet’s ambitions to increase our influence in the international aviation industry. From an operational viewpoint, we’ve ironed out the finer points and are currently finalizing our mid- to long-term business plan. Our clients can now expect a broadened range of services delivered at the same levels of efficiency, quality and operational excellence that they have come to expect from us.

Mr. Zhang Peng, chairman and president of Deer Jet, was delighted to conclude the share acquisition of UAS and very excited to see the valuable synergies our companies will be able to create in the near future. After founding Hong Kong Jet and acquiring shares of Asia Jet, Hawker Pacific and UAS, Deer Jet plans to continue to expand its global range through strategic partnerships with other Business Aviation companies. With the HNA group, we want to continue this synergy on the commercial side, our ultimate goal being to be the exclusive trip support company for all HNA aircraft.

**Are you satisfied with where UAS is today?**

Since launching UAS, we have experienced a constant level of 20% growth and by 2020 we aim to be the industry leader. To achieve this, we plan to invest more and more in technology, as we have been doing since we started in the business, which has proved to be a winning formula for us. We have also embarked on an aggressive growth strategy with a large investment in bridging the service gap in developing regions. For example, we stationed our own IATA certified on-site supervisors with ramp access in nine countries in Africa, as well as in China. We are also the first International Trip Support provider to have its own supervisors in every country in Africa. This is in addition to our extensive network of preferred handlers who must meet international standards and best practices.

**You have said that flexibility is a crucial management skill. Do you stand by that statement?**

Managerial leadership requires a multitude of skills, including identifying and communicating purpose, defining strategy, making difficult decisions and inspiring employees. That being said, perhaps one of the most overlooked management skills – and one that is vital to all others – is flexibility. In business, flexibility can be defined as the ability for an organization to quickly adapt to different external scenarios by making necessary internal changes. It is being able to respond effectively to different challenges that arise, such as changes in market conditions, technology and client needs. The key here is “respond”: always being ready to respond is crucial – otherwise you will end up with emotional reactions that are never well thought-out.

**Thank you Mr. Hosari. We now better understand why some of your customers claim that “UAS has a winning mix of capabilities, wide-ranging expertise, modern tools and honest, personalized approach to the business” – which just happens to be the meaning behind your motto!**
THE PARADISE PAPERS, CORPORATE AVIATION AND VAT

Aoife O'Sullivan

readdresses the impact of recent press reports on the corporate and private aviation industry

Much has been made in the press in recent weeks of information sourced by the German newspaper Süddeutsche Zeitung caused by an apparent leak of documents from two offshore service providers and 19 tax havens’ company registries. Süddeutsche Zeitung, called in the International Consortium of Investigative Journalists (ICIJ) to oversee the investigation. BBC Panorama, the New York Times and the Guardian are among the nearly 100 media groups investigating the papers. The reports have made for some eye watering claims presented by Journalists. Comments such as the following were made on public open forum:

“New revelations from the International Consortium of Investigative Journalists (ICIJ) have shone a fresh light on a secret world of tax havens and offshore financial deals. These structures allow lawyers, bankers and other professionals to protect their wealthy and powerful clients’ cash from tax officials or hide their dealings behind a veil of secrecy…this isn’t just a story about tax. As we have previously exposed, the secrecy sold in the offshore world enables terrorism, money laundering and sanctions-busting. It allows dirty money into our property market and banks, and lets scammers rip off honest investors and businesspeople”.

Globalwitness.org

“The details come from a leak of 13.4m files that expose the global environments in which tax abuses can thrive – and the complex and seemingly artificial ways the wealthiest corporations can legally protect their wealth”.

BBC News

Probably one of the most disturbing aspects of the leaks has been the apparent trial by media where the “facts” are presented on the front page of international newspapers. The documents, the subject of the leak were highly confidential legal documents. The press named individuals and corporations who have little to no ability to defend themselves other than possibly to continue to ignite the issue by attempting to respond publicly. Debating the rights and the wrongs of apparent witch hunts against wealthy and successful businesses who are in fact “legally protecting their wealth” in the same way the average person claims tax allowances and rebates against their own income (to legally protect their wealth) is for another paper.

My concern instead is to readdress the impact of the press reports on the corporate and private aviation industry which has long been maligned as the playing ground of the rich and famous as they gleefully fly around the world quaffing champagne, dodging taxes and laughing at the rest of us poor people. The reality is quite the opposite. It is profoundly irresponsible to bring an entire industry into disrepute with press reports that clearly do not understand the industry nor the legal rights of owners of aircraft to claim allowances and benefits on what is predominately a corporate business tool. Facts that don’t seem to make the headlines are the many exhausting hours spent by management and owners of large corporations (employing thousands of people) flying to airports and countries unattainable on scheduled airlines as they continue to build their businesses, expand into new territories, develop new products and services and provide jobs and opportunities to yet more people. A CEO I know well flies 1,200 hours per year – he has single handedly built a business employing tens of thousands of people worldwide and his travel includes meeting his top management face to face to impress on them the family culture and employee centric ethos he insists upon for his business. His travel schedule would be quite simply impossible without corporate aviation. He pays his taxes.
Corporate and Private Aviation – Some Facts and Figures

“General and Business Aviation provide closely tailored, flexible, door to door transportation for individuals, enterprises and local communities, increasing mobility of people, productivity of businesses and regional cohesion.”

Communication from the European Commission - An Agenda for Sustainable Future in General and Business Aviation, 11 January 2008

According to studies conducted by the European Business Aviation Association (EBAA), the vast majority of business jets are owned by governments and companies who make their aircraft available for transporting government officials, business leaders, and sales and marketing teams, or to shuttle Engineers and Project Managers offsite. Less than 3% are owned privately.

In the United States, Business Aviation utilizes a network of more than 5,000 airports while commercial airlines can access only 550; in Europe there are 1,200 airports accessible to business jets, versus 400 for airlines. According to a PWC report in 2008, the European Business Aviation sector contributed a total of 19.7bn in annual gross value added (GVA) to the European economy and accounted for approximately 0.2% of the combined GDP of the European Union (EU), Norway and Switzerland.

EBAA and Oxford Economics prepared an independent, quantitative study which included the following findings:

- 164,000 – persons employed in Business Aviation around Europe with 5.7 billion generated in salaries and wages
- 96% – proportion of city pairs served by Business Aviation in 2011 that had NO scheduled airline connection. The remaining 4% represent however more than 1/3 of Business Aviation traffic in volume.
- 66% – proportion of corporate decision makers regarding face-to-face meetings as critical to M&A success
- €9bn – value of Business Aviation aircraft manufacturing
- A 2016 Booz Allen Hamilton and Deutsches Zentrum für Luft-und Raumfahrt (DLR) study cites further time-saving benefits private aviation offers, including:
  - Average time saved using a private jet versus the fastest commercial alternative is 127 minutes per trip (about two months of productive business time saved per year).
  - Business Aviation saves on average 1,825 days annually due to reduced delays, compared to commercial aviation.
  - About 20% of Business Aviation flights are more than five hours faster than the best commercial alternative.

The findings from these independent reports clearly show the direct impact of Business Aviation on growth in GDP, job creation and productivity. Turning now to indirect impact on corporations, the US based National Business Aviation Association (NBAA) spearheaded research entitled “No Plane No Gain” which found as follows:

- 55% of companies using Business Aviation have in excess of 500 employees.
- 95% of Fortune Magazine’s “Change the World Top 20” companies use Business Aviation.
- Business aircraft users out-perform non-users by 23% in revenue growth.
- S&P 500 Companies using Business Aviation outperform those that don’t by 70%.
- A single business aircraft can bring an airport and its community $2.5million in economic benefit.
- Two-thirds of corporate executives who fly by private aircraft say they are more productive when working on a business aircraft compared to working in the office.

Corporate Aviation and VAT

In Europe, Value Added Tax, or VAT, is a tax most suppliers of goods and services charge by adding it to those goods and services. As soon as the turnover of a business reaches the threshold (currently £85,000 in the UK) – or will within 30 days – you must register for VAT. Once the business is VAT-registered it must (a) charge VAT – currently 20% in
of the aircraft or import into Europe may be reclaimed back through the usual system of reclaiming VAT by a business entitled to do so. The company must be engaged in economic activity and in all but some cases the relevant member state requires that the company is a local corporate structure accounting to them for the ongoing VAT treatment of the aircraft through locally filed VAT returns.

The Isle of Man has come under intense scrutiny in recent weeks. As the Guardian put it “The Isle of Man government approved tax avoidance schemes that have refunded more than $1bn to the super-rich and to multinationals on the import of hundreds of private jets into Europe...The island's private jet register is the second biggest in Europe after Germany’s. Set up in 2007, it is expected to notch up its 1,000th aircraft this year.”

Let’s be clear here. Firstly, registration of an aircraft has nothing whatsoever to do with the tax treatment of a business or of an aircraft. In accordance with the Convention on International Civil Aviation (also known as the Chicago Convention), all civil aircraft must be registered with a national aviation authority (NAA) using procedures set by each country. Every country, even those not party to the Chicago Convention, has an NAA whose functions include the registration and safety oversight of civil aircraft. An aircraft can only be registered once, in one jurisdiction.

Secondly it is very wrong to publicly shame and criticize a jurisdiction based on assumptions made about the “super rich” taken from the moral high ground of reviewing and publicizing highly confidential leaked papers. If in the event one or two people have evaded tax they should have otherwise paid by presenting “alternative facts” to the Isle of Man Treasury, those people should indeed have their tax affairs scrutinized and suffer the consequences of tax evasion. This is not the same thing as shaming an entire jurisdiction who have been lawfully applying a European VAT regulation in the same way as all other EU member states. They are following laws laid down by the EU. The basis for a business to pay and reclaim VAT is the same whether that business is selling widgets or buying services. The Isle of Man have offered themselves up to scrutiny and quite rightly are seeking to defend their name and reputation.

Conclusion

Undoubtedly, incendiary headlines attract readers. Certainly, in the current political climate the voting public worldwide are quite rightly and vehemently anti-corruption. However, when seeking out scapegoats to hang, lets try to have some balance. The same corporations that avail of tax allowances and fly around in private aircraft contribute to GDP, employ thousands at all skill levels, support local communities, build office blocks, supply products and services worldwide and even, gasp, pay tax.

Aoife O’Sullivan specializes in private, corporate and commercial aviation, military aircraft and civil aerospace. She advises on aircraft finance and regulatory issues, including corporate structures, aircraft acquisitions and airline start-ups. She is internationally renowned for her work in aircraft finance. She is a member of the Board of Aerion Corporation Inc. which is developing a supersonic business jet and was a founding member of IIBN, a network of Irish entrepreneurs. She has acted as chair of the European Business Aviation Association finance and leasing group.
Have a Seat

Take a look around. Imagine yourself in this flight deck, taking off with CPDLC-DCL, cruising with ADS-B Out and when you’re ready to land, all the ATC controllers will take notice of your LPV. The aftermarket InSight system provides impressive performance and will add life to your aircraft for years to come.

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