Strength in Numbers

Numbers can speak volumes to an industry’s success and growth, which is why we find value in the annual Argus TraqPak data report. TraqPak is the most targeted and sophisticated aircraft activity analysis reporting database in the industry. According to their Business Aviation 2017 Review, Part 135 operators in United States and Canada flew 1,574,554 on-demand charter hours in 2017, a 9.2% increase compared to 2016. Of those hours, 6,508 of them were flown Part 135 by Wing Aviation, making Wing Aviation one of the top 35 operators in North America.

The year also provided Business Aviation with its best year since 2008, with growth shown in every major aircraft and operational category. It was this increase in operations that contributed to Wing’s decision to launch the new ASCEND Jet Card program. ASCEND offers perks such as guaranteed rates and availability with a low deposit, no blackout dates, and no fuel surcharges, to name just a few. This program will enable us to increase the utilization of our charter fleet further more in 2018.

The year provided significant milestones for Business Aviation, and although there are some hurdles to get through in 2018, Wing is excited and ready for the challenge.

We hope you enjoyed the holidays with your friends, family, and loved ones. Thank you all for being a part of our Wing Family.

David Riddle
President, Wing Aviation
driddle@wingaviation.com
SIMPLIFIED, STRAIGHT-FORWARD

JET CARD PROGRAM

Ascend is a brand-new Private Aviation Jet Card Program - powered by Wing Aviation - to provide jet travel on a guaranteed basis with guaranteed availability, guaranteed hourly rates and guaranteed safety standards.

Enjoy all-inclusive pricing, streamlined booking, transparent account processing, and interchangeable charter hours with no long-term commitments required.

Ascend Jet Card program provides the easiest and fastest process available to secure private air travel with the price consistency and ability to predict costs. Bookkeeping is simplified - no invoices to pay and charges are simply debited from an initial deposit.

- No Club or Membership Fees
- No Fractional Commitment
- No Fuel Surcharges
- No Interchange or Hidden Fees
- No Positioning or Ferry Flight Charges
- No Black Out Dates

ASCENDJET.COM
Pilot Demand Outlook

Business Aviation operators are finding it harder to staff their operations, in part due to increased competition from the airlines, and in part because of an overall decline in the number of people choosing aviation careers.

Back in October 2017, invoking the National Emergencies Act, President Donald Trump signed an executive order that allows the Air Force to voluntarily recall up to 1,000 retired aviators for active duty. Just a few days later, an Air Force official indicated they had no current plans to act on the authority granted them by the president's order. However, the Air Force is currently responding to the pilot shortage with various incentive programs to keep officers in uniform longer. The military's pilot shortage crisis has been compounded by pilot shortages in the commercial airline industry, as well as the business aviation industry.

The pilot shortage isn’t limited to the U.S., it is a worldwide problem expected to continue for years to come. By 2036, the world’s commercial aviation industry will need over 600,000 new commercial airline pilots – mainly in Asia Pacific, according to a Boeing forecast released in July 2017. U.S. commercial aviation pilots have a mandatory retirement age of 65, and the shortage of pilots poses a serious challenge particularly for the airlines. Over the next 10 years, the International Air Transport Association (IATA) forecasts 4.2% annual passenger growth. IATA reports the number of unique city-pairs has roughly doubled in the past 20 years to over 18,000. If this trend continues, the number of citypairs will exceed 25,000 by 2027, requiring additional aircraft to serve these new routes. The Asia Pacific region will lead the worldwide growth in demand for pilots, with a requirement for over 250,000 new pilots, with half the need from North America. The number of pilots required per aircraft is primarily determined by aircraft utilization and related regulations. Regional aircraft (typically 19 to 100 seats) are used mainly to link smaller markets to hub-and-spoke networks as well as shorter point-to-point routes, and requires on average 10 pilots per aircraft. Narrow-body jets (typically 100 to 220 seats) are widely used by network carriers and lowcost carriers on short- and medium haul routes of up to five to six hours, including overnight ‘red eye’ services. Today, 11 pilots are needed on average for narrow-body jets. This segment is expected to represent over 60% of the global in-service fleet over the next 10 years.

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NBAA’s Business Aviation Insider magazine focuses on the pilot demand outlook in detail in its January/February 2018 issue; stating airlines are ‘siphoning off business aviation talent at an alarming rate’.

**Workforce Study**

- Top reasons why some pilots are considering leaving business aviation to fly for commercial airlines:
  1. Predictability of Schedule
  2. Compensation
  3. Retirement Benefits
  4. Job Stability

National Business Aviation Association is confronting the personnel shortage issue with their “All Hands On Deck” approach. A team of experts recently started mentoring all the NBAA members on best practices for pilot retention and ways to articulate the business aviation’s own value proposition. In addition, NBAA suggests getting decision makers in business aviation familiar with the strong demand for qualified aviation personnel and the time investment needed to recruit and train new people. In many cases, the organization firmly believes that it costs less to retain qualified crew members that it does to find new people to replace them. In addition to offering a wide array of professional development programs targeting both industry veterans and newcomers, the association and its committees are constantly working to find ways to make our industry more attractive to current and potential personnel.

NBAA Business Aviation Management Committee (BAMC) surveyed over a thousand business aircraft pilots about their career satisfaction and quality of life concerns. To conduct this 26-question survey in late 2017, 11,980 survey links were dispersed and 1,600 responses collected in return (13.4% response rate - above the average of a typical NBAA survey). On average, 55% of the survey responses were Pro-Airline pilots. This number is up to 69% for those who are working for Part 135 operations. The top reason given for the consideration to work for airlines is the predictability of schedule.

The overall survey results offer a stark picture of the challenges facing the industry, but also provide insight into what business aviation companies can do to retain their talent.

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**Tax Cuts & Jobs Act Includes Key Provisions to Help Growth in General Aviation**

The major impact of tax reforms on general aviation is the immediate expensing of new and used equipment. The new law permits 100-percent immediate expensing by the taxpayer for both factory new and pre-owned aircraft as long as it is the taxpayer’s first use of the aircraft. Under the legislation, after 2022, there will be a phasedown of bonus depreciation in increments of 20% each year for qualified aircraft acquired and placed in service before 2027. Another resolution was the dispute over airline ticket taxes improperly imposed on aircraft management fees; the aviation fuel tax therefore will change from the current 7.5% federal transportation excise tax.

Visit wingaviation.com/tax-reform to review more details about the new legislation.
Wing Aviation Crew Helped Humanitarian Aid in the U.S. Virgin Islands Devastated by Hurricane Maria

Back in mid November, our Gulfstream GIV-SP crew had a trip to St Croix flying volunteers to assist with the hurricane relief on the island. Rather than staying put and waiting for the return flight, our crew members Eric Schlabach, Alex Gill and Kristy Lucas decided to roll up their sleeves and help assist with the relief work. The rain and 90°F+ heat didn’t deter our crew from joining the other volunteers with cleaning and organizing aid for the locals.

Chris Ramby, Pilot & Artist

Wing Aviation’s Embraer Phenom 300 Pilot, Chris Ramby, grew up in the birthplace of aviation, among the rolling hills of Ohio. While always keeping an eye toward the sky he learned the welding and fabricating trade early on as a teenager. A discovery of accessible flight lessons after high school had Chris heading south to cultivate his professional flight career as a corporate pilot. Today, Chris manages both his passion to fly and his creative obsession. During Hurricane Harvey, he kept himself busy and created one-of-a-kind metal art work, which was later auctioned off during the Wing Aviation Open House. All proceeds from Chris’ artwork went towards helping the victims of Hurricane Harvey.
WING AVIATION UPDATES ITS HAWKER 900XP

The 2008 Hawker 900XP (Formerly N309KR, now N997WA) recently went through an extensive interior refurbishment, exterior repaint and avionics update at the ALE Service Center.

Besides the cosmetic changes, the aircraft is now equipped with the NextGen avionics and is ready for the 2020 Automatic Dependent Surveillance-Broadcast (ADS-B) mandate.

ALE Service Center is an aeronautical service and maintenance center with facilities in Toluca and Monterrey, Mexico. ALE provides services such as: maintenance, avionics, paint and interiors for Bombardier, Learjet, Cessna Citation, Beechcraft Hawker, and AgustaWestland, among others.

➢ To view a time-lapse video of the paint project, visit wingaviation.com/ale

N997WA at the ALE Service Center getting ready for its paint job.

Interior Updates: Garrett Albatross leather softgoods, new headliner and new wood veneer in Pommele Makore.

Exterior Updates: Pearl White faded to Gray Pearl with Cascata Gray stripes, on Night Blue lower fuselage and tail.
The Science Behind Low Pressure Flying


A prospective, single-blind, controlled hypobaric-chamber study of adult volunteers was conducted to determine the effect of barometric pressures equivalent to terrestrial altitudes of 650, 4000, 6000, 7000, and 8000 feet above sea level on arterial oxygen saturation and the occurrence of “Acute Mountain Sickness” and discomfort as measured by responses to the Environmental Symptoms Questionnaire during a 20-hour simulated flight.

Researchers found that the people who “travel to terrestrial altitudes above 6,500 feet experience acute mountain sickness, a syndrome characterized by symptoms of headache, nausea, vomiting, lassitude, and sleep disturbance”.

Both commercial and business aircraft manufacturers are solving the “Acute Mountain Syndrome” problem by adjusting the cabin pressurization. The new Boeing 787 Dreamliner and the Airbus A350 are now pressurized to 6,000 feet, down from 8,000 feet on previous models, which makes a huge difference in passenger comfort; especially on the long-haul trips these aircraft are designed for. Next generation business jets push the limits of passenger comfort, utilizing improved seating and a multitude of entertainment options. While you can refurbish any past generation aircraft with many of today’s amenities, you can’t simply update an old aircraft to meet the performance details, including the cabin environment characteristics.
Cabin environment does influence the travel experience. While the interior design finishes are essential and can be engineered to provide tranquility and a relaxing journey, cabin pressurization and the air circulation during a flight ultimately defines passenger comfort level.

Increasing cabin pressure and thus lowering cabin altitude presents a structural challenge. The new ‘egg shaped’ fuselage design that allows stand-up cabin configuration also added to this challenge. A slightly oval-shaped cabin fuselage not only provides a stand-up cabin environment, but also gives more head and shoulder room at the outboard seats, creating plenty of space for people to move around.

High pressure inside a container forces the structure to become circular due to the forces being exerted equally in all directions, as if blowing up a balloon. That’s why aircraft fuselages are typically designed as cylinders. Higher pressures inside the cabin impose greater loads on the fuselage, so the structure must be stronger. The ‘form follows function’ methodology was challenged with the uneven shape of the fuselages on the clean-sheet design aircraft and keeping the stress points under control with heavy pressurization. Advances in engineering and computing led to the clean-sheet design philosophy to be translated into the highest performing and most comfortable aircraft interiors available today.

The combination of clean, replenished air and a low interior altitude helps reduce the effects of jet lag so that passengers arrive feeling more refreshed and alert.

**CLASS LEADERS**

+ The cabin altitude of the Embraer Legacy 450 and Legacy 500 mid-size business jets was recently increased from 9.3 psi to 9.73 psi to reduce the maximum cabin altitude to 5,800 feet. The aircraft’s environmental control system also preserves a sea-level cabin altitude while flying under 27,050 feet.

+ Cessna Citation Latitude maintains a cabin altitude of 5,950 feet while cruising at 45,000 feet.

+ Gulfstream’s new G500 and G600 aircraft also provide a comfortable ride; low cabin altitude of 4,850 feet at the aircraft’s maximum altitude of 51,000 feet and 100% fresh air replenished every two minutes help reduce the effects of jet lag.
ADDISON AIRPORT OPEN HOUSE

Over 100 guests attended our special Open House at our new Addison Airport facility, where we were able to showcase several of our managed aircraft as well as the new Bell 505 Jet Ranger X helicopter and select exotic cars from Boardwalk Auto Group. Our Addison Airport facility is the home to our North Texas operations, supporting our Dallas–Fort Worth based aircraft.
FORGETTING YOUR ID COULD DELAY YOUR FLIGHT
On all Part 135 flights, the FAA requires our flight crew to view government-issued identification of all passengers 18 years of age or older and to compare the IDs to the passenger manifest. For domestic Part 91 flights, we highly recommend that all passengers bring ID. For international flights, government-issued passports are required for all passengers.
Our diverse fleet is primed for a wide range of on-demand travel, from that corporate day trip to Midland to your golf retreat in Augusta.

For business or pleasure, we offer service on standby to help you select the perfect aircraft for your charter needs.

Fleet Update

+ N1150H // PILATUS PC-12 NG
+ N645MS // HAWKER 800A
+ N996WA // EMBRAER LEGACY 600
Pilatus PC-12 NG is the right answer for practically any mission by providing speed, comfort, range, efficiency and high payload capability.

**FEATURES**

- **Passenger Capacity:** 8
- **Baggage Capacity:** 40 cu ft
- **Max Speed:** 296 mph
- **Max Range:** 1,845 nm

**AMENITIES**

- Enclosed Lavatory
- Power Outlets
- Large Cargo Door

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1. Cargo Door 1
2. Cargo Door 2
3. Cargo Door 3
Comfort, amenities and performance are hallmarks of any mid-sized business jet, and the Hawker 800A offers the complete package.

**FEATURES**
- Passenger Capacity: 8
- Baggage Capacity: 48 cu ft
- Max Speed: 447 mph
- Max Range: 2,390 nm

**AMENITIES**
- Mini Galley with Microwave
- Enclosed Lavatory
- Wi-Fi
- Power Outlets

**FLOOR PLANS**
Every detail of the Legacy 600 has been carefully considered to make every journey as carefree and as comfortable as possible. It is the only jet in its category with three truly separate cabin zones so passengers never feel constricted. Some can work or dine, while others can relax or sleep on the fold out divan in the third cabin zone.

**FEATURES**
- Passenger Capacity: 13
- Baggage Capacity: 240 cu ft
- Max Speed: 528 mph
- Max Range: 3,650 nm

**AMENITIES**
- Forward Galley with Oven and Microwave
- Enclosed Lavatory
- Passenger Airshow System with Flight Deck Controller
- Power Outlets
- Flight Phone
- Wi-Fi
- DVD/CD Player
you are immediately connected with a dedicated Travel Manager—a.k.a., your private concierge—who effectively orchestrates every detail of your travel.

+ HOW FAST? SUPERFAST!
+ WE FLY CELEBRITIES
+ GASTRONOMIC ADVENTURE THROUGH SPAIN
HOW FAST? SUPER FAST!

With its 800 horsepower output, the new 812 Superfast is the most powerful and fastest road-going Ferrari ever built (with the exception of the special limited-series). Wing Aviation hosted a special Ferrari 812 launch event for the Boardwalk Ferrari at its Addison Airport hangar with over 200 guests and Ferrari fans in attendance. For more information regarding the new Ferrari 812 Superfast, visit boardwalkferrari.com
WE FLY CELEBRITIES
Many wonder if Wing Aviation fly celebrities. Yes we do; even Pikachu & Elmo! When we were asked to surprise some young travelers on a flight, we arranged these special balloons onboard. We aim to please all our passengers - including the celebrities - and try our best to accommodate all requests. A special drink, magazine, entertainment or big surprises for the kids, just ask - we'll take care of all the details for you!
A-Gastronomic-Adventure-Through-Spain

A one-of-a-kind culinary quest is waiting for you this fall. Join travel-guru Andrew Butler, Houston’s acclaimed chef Austin Simmons and foodies alike on a gastronomic adventure starting in Madrid.

This week long adventure includes behind the scenes tours of Spain’s most sought-after restaurants - Meson Candido, El Capricho, Restaurante Zortziko, Rekondo to name a few. Collaboration dinners with Chef Austin Simmons and various Michelin-Starred Chefs will help you interact with world-renowned Spanish Chefs, such as Chef Daniel García and Chef Jose Gordon.

Visits to the medieval town of Segovia and the coastal town of San Sebastian, a private tour of the famous Bilboa Guggenheim Museum, and unique wine tastings at Rioja Region Wineries are among the many other things you’ll experience.

Please contact Andrew Butler for more information. For Wing Aviation clients, additional amenities and privileges can be arranged at no additional cost.

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