


## AIRBORNE

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## NBAA-BACE - Time to reconnect...

"There's clearly a lot of excitement for NBAA-BACE ... a pent-up desire for people to connect." So said Ed Bolen, the NBAA's president and CEO, summing up the annual NBAA-BACE event with a pithy epithet as it returned to Las Vegas from 12-14 October after a year's virtual absence due to Covid restrictions.

This year's physical event featured some 750 exhibitors, including more than 100 displaying for the first time. Almost all the major OEMs, with the notable exception of Gulfstream Aerospace, had a significant presence in the hall and in the huge static aircraft display. The Savannah-based manufacturer has imposed corporate travel restrictions and decided to focus on smaller events before a planned return in 2023. Summing up the first 'in person' show since 2019, Bolen's theme was 'connection'. At the opening session, he noted: "The industry is taking off. It's an exciting time to celebrate where we've been, where we are, and more importantly, where we want to go ... This is an enormously exciting time in terms of innovation, technology, sustainability, and diversity and inclusion."

With the UN's COP26 climate change conference in Glasgow looming just a few weeks away, the heads of the General Aviation Manufacturers Association (GAMA), International Business Aviation Council (IBAC) and NBAA said the industry would continue its goal of increasing fuel efficiency 2% per year between 2020 and 2030, on the road to net-zero CO2 emissions by 2050. These new ambitions build on the Business Aviation Commitment on Climate Change (BACCC) made in 2009, when the industry pledged to reduce carbon emissions 50% by 2050, increase fuel efficiency 2% per year from 2010 to 2020, and achieve carbon-neutral growth by 2020.

The key to achieving this significant target will be to rapidly expand the availability and use of Sustainable Aviation Fuel (SAF) along with the prioritisation of alternative propulsion, including Advanced Air Mobility (AAM) electric aircraft. There was also a notable emphasis on the use of ecologically friendly materials and recycling to reduce carbon emissions.

## Q3 OEM deliveries & order backlogs

Four of the five principal business aircraft OEMs have returned their Q3 delivery and sales figures. Order books continue to grow exponentially but deliveries are being held down by earlier production problems related to the pandemic.

Gulfstream delivered 31 aircraft in Q3 – 25 large cabin and six G280 – one down on the 32 delivered in the same period last year. Its backlog, however, has now hit USD14.69 billion, its highest level for six years, with orders in Q3 jumping to USD3.25 billion, a 79% increase over the same period in 2020.

Canada's Bombardier delivered 27 aircraft in Q3, an increase of three over Q3 2020, comprising 15 Globals, eight Challengers and four Learjets. Its order backlog now stands at USD11.2 billion, up from USD10.7 billion at the end of 2020. The manufacturer reported an operating loss of USD377 million as it continues to reduce its debt and restructure its finances.

Brazil's Embraer delivered 21 aircraft in Q3 – 14 Phenom 300, two Praetor 500 and five Praetor 600. This is the same number as Q3 2020, but YTD deliveries stand at 54 units, compared to 43 at the same stage last year.

Textron Aviation delivered 49 jets in Q3, almost double the 25 it delivered in the same period last year. It also handed over 35 turboprops, an increase of 67% over Q3 2020. Textron's backlog now stands at USD3.5 billion – a level not seen since 2010 – and grew by a further USD721 million during the last quarter. This reflects both high overall demand and particularly from new customers looking to enter the market after the pandemic.

## Traffic continues to grow

Bizav activity continues to set records according to the latest traffic data produced by specialist analyst WingX Advance. Worldwide traffic in October was up by 19% over October 2019, it reported. By comparison, commercial airline traffic remains down on October 2019 by 28%. In Europe, overall October bizav activity was up by 28% over October 2019 – with Spain 52% higher, Italy up 42% and the UK up 18%. Traffic in the US, up by 2% over October 2019, is growing more slowly but this figure is expected to improve following the relaxation of entry restrictions for international arrivals from 8 November.

## Honeywell's bizjet delivery forecast

Flight activity may now be exceeding 2019 levels, but bizjet deliveries are set to take several years to recover from the pandemic. According to forecast data published in the 30th annual Business Jet Delivery Outlook by Honeywell Aerospace, deliveries are not expected to reach pre-pandemic levels until 2025 while expenditure on new aircraft is expected to reach 2019 levels by early 2023. Over the next 10 years, Honeywell expects overall deliveries of 7,400 new bizjets worth an estimated USD238 billion. The forecast through to 2031 estimates average annual growth of 3% in terms of deliveries, which is in line with overall worldwide long-term growth. The US remains the most important market for bizjet deliveries, accounting for over 60% over the next 10 years.

## AVIATION SERVICES HUB:

Aviation finance

The new and used corporate aircraft market continues to function in the face of the Covid pandemic and buyers continue to seek finance for these transactions, with a huge growth in demand in some sectors and geographical areas. RANA has built up relationships with a number of banks, finance houses, leasing companies and groups of individual investors that have demonstrated an appetite for investment in the corporate aviation sector.

Lenders will look at a number of different factors and each has its own criteria for acceptance, in addition to loan to value ratios and the length of term of any potential deal. These criteria may include: the maximum age of the aircraft; whether it is new or pre-owned; the book value of the aircraft; the jurisdiction of the aircraft's registration; the proposed operational plan for the aircraft or the type and nationality of the client. Any such financing is of course viewed on a strictly case-by-case basis with tailored terms and conditions.

## Bizav cops negative headlines at COP26

As the United Nations Climate Change Conference COP26 opened in Glasgow on 1 November, business aviation attracted some very negative headlines from the popular press. According to data from WingX Advance, 118 business jets brought political and business leaders to Glasgow, Prestwick and Edinburgh airports in time for the opening of the conference. Several other non-commercial flights also operated to bring in delegates and cargo. Many of the aircraft arrived from Rome with leaders who had been attending the G20 meeting during the weekend before the event. The 'hypocrisy' of using private jets to attend a climate conference was one of key criticisms and it is an accusation that bizav must challenge. The need to save crucial time is a well-rehearsed one but can be difficult to justify when confronted by a large number of such flights. It certainly also did not help that a number of aircraft were monitored making often very short positioning flights owing to limited parking at Glasgow airport. They then flew back to collect their passengers.

## Corporate aircraft news

OEMs have long used NBAA-BACE as a valuable platform for launching new models or significant upgrades to existing products and NBAA-BACE 2021 was no different. Japanese manufacturer Honda Aircraft unveiled the HondaJet 2600, a 'concept' of a midsize jet seating up to 11 passengers. As with the smaller – and eminently successful – HondaJet HA-420, the manufacturer has unveiled the design as a concept to gauge market opinion before formally launching the project.

According to Honda Aircraft president and CEO Michimasa Fujino, the 2600 is aimed at the US transcontinental market for a larger capacity aircraft. It is envisaged that the composite construct 2600 will offer 40% less fuel burn than other midsize jets. During the unveiling of a cabin mock-up, he said: "We became aware of a need for a new kind of aircraft based upon a new market segment. This concept will unlock an entirely new frontier of possibilities, new destinations, and an opportunity to reduce aviation's carbon footprint."

Just a day before NBAA-BACE opened, Textron Aviation unveiled upgrades to two of its well-established models that focus mainly on enhancements to the cabin of both models. The Citation M2 Gen2 offers several enhancements to the seven-seat Citation M2 light jet. These include new cabin lighting, folding seats to allow for additional storage and customisable interiors. Deliveries of the M2 Gen2 will begin in Q1 2022. The US manufacturer also unveiled the Citation XLS Gen2, which enhances the XLS+ midsize twinjet. The Gen2 includes a new airstair, a new 'eco' interior option using renewable textiles, new cabin lighting, a new refreshment centre and wireless chargers. The XLS Gen2 will commence deliveries in Q2 next year.

In mid-October, Italian manufacturer Piaggio Aerospace announced a number of significant upgrades to its P.180 Avanti Evo twin turboprop. The aircraft will now be offered with a new high-power steel braking system, a new interior, a digital audio system, a greater fuel capacity and improved lighting. Most of these enhancements are due for certification in H1 2022. The manufacturer also expects to receive certification in Q3 2022 for a new cabin pressurisation system, a new satcom system and environmental control system.

Tamarack Aerospace announced at NBAA-BACE that it is developing active winglets for both the -200 and -300 series Beech King Air twin turboprops that will offer significant performance enhancements, particularly in 'hot and high' locations. The Idaho-based manufacturer also pointed to the sustainability of the winglet in respect of reduced drag on the airframe and improved ability to power aircraft using Sustainable Aviation Fuels or electric propulsion. The winglet is initially being targeted at military users of the King Air but will be extended to civilian operators in due course.

Boeing Business Jets (BBJ) marked its 25th anniversary at NBAA-BACE and also welcomed the return to service in September of the BBJ MAX 8 from its enforced grounding after two well-publicised crashes involving airliner versions of the 737-8MAX. The manufacturer is looking forward to service introduction of the MAX 7 and MAX 9 and is also developing a corporate version of the yet-to-enter service Boeing 777-9 wide body twin.



## AIRCRAFT FACT FILE \\\

### Piper PA-31 Navajo C



#### CATEGORY

Twin piston

#### MANUFACTURER

Piper Aircraft, USA

#### ENGINE

2 x Lycoming TIO-540-A2C piston

#### LENGTH

9.94 m

#### WINGSPAN

12.40 m

#### RANGE

1,875 km

#### MAX. SPEED

420 kmh

#### SEATING CAPACITY

7

#### NO. OF CREW

1-2

#### MAXIMUM TAKE-OFF WEIGHT (MTOW)

2,948 kg

#### DESCRIPTION

Production of the Piper Navajo family lasted from 1967 to 1984, during which time just over 3,900 units were built in total. The PA-31 Navajo was a twin-engine piston aimed primarily at the general aviation market, although variants also sought to fill the light commuter airliner and corporate travel roles. The project was under development from 1962 and the prototype made its first flight in late 1964. Certification was delayed until 24 February 1966 and then recertified to encompass an increased MTOW. Over the next few years, the original concept received upgrades and the aircraft was produced in a number of different versions.

The Piper Navajo C began production in 1974 and featured an improved powerplant along with other minor enhancements over the Navajo B, which had entered service three years earlier. Unusually, the Navajo was manufactured under licence outside the US using kits supplied by Piper. Aircraft were produced in both Brazil and Colombia under this programme.