NBAA-BACE 2017 - 'A strong,

meaningful show'

This year's 'National Business Aviation Association – Business Aviation Convention & Exhibition' (NBAA-BACE) opened in Las Vegas just 10 days after a mass shooting in the city that left some 58 people dead. Not surprisingly, security was enhanced and the mood of the show on opening day was described as "sombre but resolute".

The NBAA is celebrating its 70th anniversary this year and celebrations to mark this milestone were in evidence throughout the three-day event. Visitors to the Las Vegas Convention Centre were greeted by a huge 3D birthday card to mark the occasion, while the large static display at Henderson Airport featured a number of historic aircraft, including the iconic Douglas DC3.

NBAA-BACE 2017 attracted some 1,100 exhibitors and an estimated 27,000 visitors. Unusually, none of the major manufacturers elected to launch a new model at the event but the static display featured three designs making their NBAA-BACE debuts – the Bombardier Global 7000, Gulfstream G600 and Pilatus PC-24. It was clear that investment continues in evolving programmes and certainly there were sufficient announcements to allow us to produce bumper Corporate Aircraft News in this month's edition.

NBAA-BACE also featured a host of educational sessions aimed both at current practitioners and the next generation. The sessions also included industry legends, Hudson River hero-pilot Capt. 'Sully' Sullenberger and astronaut Capt. Jim Lovell, who both spoke out against the proposed Air Traffic Control (ATC) privatisation.

There was also in-depth analysis of the state of the corporate jet market, in both the US and further afield. The key findings can broadly be summarised thus: traffic levels have not yet returned to pre-global financial crisis highs; market predictions continue to fall; there are a large number of pre-owned aircraft available; manufacturers are continuing to invest but they are working on new models that they have already announced.

NBAA-BACE continues to surprise and stimulate interest in the industry. NBAA CEO Ed Bolen said: "As we draw the curtain on NBAA-BACE 2017 and our 70th anniversary, we leave Las Vegas inspired by the passion and dedication in the business aviation community, and excited for the industry's future."

# Honeywell downgrades forecasts

Business jet deliveries will fall by 3.5% in the next 10 years and decrease by 2.3% in terms of overall value compared to last year's predictions, according to the Global Business Aviation Network produced by Honeywell Aerospace. The firm estimates that the next decade will see 8,300 aircraft delivered at a current market value of \$249 billion.

President for The Americas Ben Briggs said: "Declining used aircraft prices, continued low commodities prices, and economic and political uncertainties in many business jet markets remain as near-term concerns for new jet purchases."

Strikingly, the firm estimates that deliveries for 2017 will total between 620 and 640 airframes – the lowest since 2004. However the report did point out that this should be the last year of such declining figures. This is largely due to the introduction of new models over the next two years.

## A temporary setback for Jersey

The Jersey Aircraft Register (JAR) suffered a temporary setback in mid-October because the island's Director of Civil Aviation was forced to suspend the certificate of airworthiness (CofA) for the JAR's sole registered aircraft. The grounding followed the takeover of Avisa, the UK company that provides specialist technical support to JAR. As a result, the sole aircraft under the JAR's 'ZJ' marks (a CitationJet CJ4) was grounded. Luckily it was undergoing heavy maintenance in Bournemouth at the time and operations were not impacted. At the end of the month the Jersey government confirmed that it had employed a new provider on a temporary basis while it seeks to find a long-term replacement for Avisa. The aircraft's CofA has now been restored.

# Falcon 5X faces new delays

Dassault confirmed at NBAA-BACE that it anticipates a further delay to the Falcon 5X project due to ongoing problems with the Safran Silvercrest engines that are slated to power the new twin. It is understood that problems were experienced with the high-pressure compressor during flight testing earlier this year on a Gulfstream testbed. Earlier delays with the new powerplant have already pushed the projected service entry for the 5X to 2020. It is not yet known whether these new problems will have a further impact on the timetable.

## **AVIATION SERVICES HUB:**

Aviation finance

Despite the continued economic uncertainty, the new and used corporate aircraft market continues to function and buyers continue to seek finance for these transactions, with growing demand in some sectors, business models 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 of course 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; the proposed mode of operation and home base for the aircraft; whether it is new or pre-owned; the book value of the aircraft and its previous maintenance history; the jurisdiction of the aircraft's registration; 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.

# Charter flights sustain YOY growth in European traffic

European corporate jet charter flights rose 13% YOY in October, according to the latest data produced by specialist analyst WINGX Advance. The company's Business Aviation Monitor also noted that overall business traffic was some 8% up YOY. These increases come despite the usual fall in traffic following the high summer peaks. In its summary, WINGX noted, "the market appears to be responding to a better outlook for the economy". Activity in Western Europe was particularly strong with large increases in traffic from France, Italy, Spain and Germany. One of the most significant increases came from a 10% uplift in turboprop private flights. Business jet private flights however maintained their stagnant overall performance for the year with a fall of 0.4%.

# Corporate aircraft news

French manufacturer Daher celebrated a significant landmark during NBAA-BACE with the delivery of its 200th TBM 900 series single turboprop. The first, a TBM 900 entered service in 2014. Also making its debut at this year's show was the company's latest variant – the TBM 910. The 910 was introduced in April this year and features an upgraded Garmin G1000 NXi avionics suite.

Textron Aviation displayed a cabin mock-up of its new flagship Citation Hemisphere at NBAA-BACE in Las Vegas. The new model is due to make its first flight in 2019 and is slated to receive FAA certification in 2020. The twin-jet Hemisphere will be the largest of the Citation range when it enters service and will be the manufacturer's first entry into the large cabin market. Textron used the Las Vegas event to formally open the order book for the new model. The aircraft has a current book price of US\$35 million. The aircraft is to be powered by the Safran Silvercrest engines that are also set to feature on the Dassault Falcon 5X.

Brazilian manufacturer Embraer has unveiled a new version of its very popular Phenom 300. The Phenom 300E ('Enhanced') will feature a fully redesigned cabin and a new High Definition Cabin Management System/In-flight Entertainment system (CMS/IFE) provided by Lufthansa Technik. It is anticipated that the new version will enter service Q1 of 2018.

Pilatus CEO Marcus Bucher said in his statement to NBAA-BACE 2017 that the Swiss manufacturer was "at the very end of the development programme". Bucher confirmed that the groundbreaking twinjet PC-24 looks set for certification and initial customer deliveries should begin before the end of this year. Test prototypes have undertaken some 1,250 flights, amassing over 2,000 hours. A considerable amount of this flying has involved a test vehicle based at the Spanish airport of Granada (GRX) at the foot of the Sierra Nevada.

Gulfstream used NBAA-BACE to confirm that the operating performance for both the G500 and G600 models will be better than originally announced. The G600 will offer an increase of 556km in range at both Mach 0.85 and Mach 0.90 high speed cruise. Similarly the G500 will offer an increase of 370km at Mach 0.85 and an uplift of 1,111km at high speed cruise.

Remanufacture specialist Nextant Aerospace used Las Vegas to unveil the second phase of its Challenger 604XT project. The aircraft will feature a new two-zone cabin and an uplift in range by 926km (500nm). The company announced phase one of the programme earlier this year, which was focused on new touchscreen avionics. The remanufactured aircraft is expected to receive certification next year.

In press interviews during NBAA-BACE, chairman and CEO of Dassault Aviation Eric Trappier confirmed that the French aircraft manufacturer is working on a new Falcon programme. He declined, however, to give any further details of performance or estimated specifications.

Bombardier's new flagship Global 7000 made its NBAA-BACE debut in Las Vegas as the company displayed FTV4 (flight test vehicle 4) C-GLBR at the show. The aircraft, which is set for certification during the second half of 2018, has been developed from the popular Global 6000 with a new wing and new powerplant (the General Electric Passport 20).



# AIRCRAFT FACT FILE \\

Bombardier Learjet 75



#### **CATEGORY**

Mid-size jet

#### **MANUFACTURER**

Bombardier Aerospace, Canada

#### **FNGINE**

2 x Honeywell TFE731-40BR turbofans

LENGTH WINGSPAN
17.70 m 15.50 m

 RANGE
 MAX. SPEED

 3,778 km
 861 kmh

SEATING CAPACITY NO. OF CREW

MAXIMUM TAKE-OFF WEIGHT (MTOW)

9,752 kg

## **DESCRIPTION**

The Learjet 75 project was first announced in Geneva at EBACE in May 2012. The first production example flew almost a year later and the variant received FAA certification in November 2013.

The 75 was designed to replace the popular Learjet 45 and apart from a slightly different winglet design there is little external difference between the two models. The key distinction however is the powerplant. The Learjet 75 features a new higher rated variant of the Honeywell TFE731 turbofans used to power the earlier model. It also features improved avionics (the Bombardier Vision flight deck) and those new winglets. Changes in powerplant and winglets afford the Learjet 75 an increased range of 4% over the 45XR.

Sales of the Learjet 75 were initially affected by delays to the programme during the test stage, but the aircraft has subsequently clocked up significant sales. The aircraft reached the 100 aircraft delivery landmark in June 2017.