

## Sound barrier - the end of AS2

Regular readers of Airborne will have followed the high-profile development and progress of Aerion Supersonic to develop a new supersonic business jet – the AS2. It therefore came as a bitter blow when, on 21 May, the US manufacturer announced the cancellation of the AS2 programme, citing overwhelming financial pressures.

In a press statement the firm said: "The AS2 supersonic business jet programme meets all market, technical, regulatory and sustainability requirements, and the market for a new supersonic segment of general aviation has been validated with \$11.2 billion in sales backlog for the AS2. However, in the current financial environment, it has proven hugely challenging to close on the scheduled and necessary large new capital requirements to finalise the transition of the AS2 into production."

In a smooth development path, Aerion had previously announced manufacturer participation from major OEMs, the construction of a new headquarters and production facility in Melbourne, Florida, and a substantial order book including a commitment for up to 20 aircraft from NetJets. The programme had also established its 'green credentials' through its commitment to the use of sustainable fuels. The first flight of the AS2 had been planned for 2024, with initial deliveries set for 2027.

Just days later, United Airlines gave a boost to all those yearning for supersonic travel by setting out a commitment to purchase 15 Overture airliners under development by Boom Supersonic; the airline also holds options for a further 35. These aircraft will fly at Mach 1.7 (twice the speed of current airliners) and will seat up to 55 passengers. The Overture is expected to enter service in 2029.

## Global Jet Capital - bizav market "demonstrates strength"

Bizav finance specialist Global Jet Capital published a highly positive assessment of market activity in the first months of 2021. In its Q1 market briefing, the firm noted that bizav market activity continued to "demonstrate strength" following "remarkable resilience" during the worst of the global pandemic. The briefing pointed to increased orders for OEMs, historically low inventory levels for pre-owned aircraft and a growth in charter demand fuelled by a new constituency of clients not previously using business aviation. The briefing noted: "The global economic future is uncertain in the near term, despite pockets of strength, due to continued Covid-19 related lockdowns and uneven vaccine rollouts. The business jet market, however, remains strong and is set to grow in 2021."

## UK travel restrictions add to uncertainty

Despite talk of a UK-US 'travel corridor' and the easing of restrictions on non-EU visitors by the European Union ahead of the crucial summer tourist season, UK leisure and business travellers continue to face uncertainty and extremely limited options. The UK government implemented a 'traffic light' destination system earlier this year, based on a number of factors including the number of infections and vaccination status. The initial 'green list' included 12 countries and territories, of which just three represented reasonable options for UK travellers. The abrupt removal of Portugal from this list in early June dismayed the business and tourism travel sectors and will do nothing to stimulate a return to previous traffic levels.

## Global bizav traffic recovery continues

Flight numbers are continuing to recover to pre-pandemic levels after the lifting of many Covid-19 travel restrictions, according to the latest bizav traffic data from specialist analyst WingX Advance. Overall global traffic for early June, it reported, was 49% up compared to the same period in 2020 and just 5.3% below the June 2019 figure.

In Europe, business jet flights are operating at 18% below pre-pandemic levels but the first five months of 2021 saw a 33% increase over the same period last year. This contrasts with the seismic decline in commercial airline activity, which was 71% lower than pre-pandemic levels. May and early June brought significant growth in traffic numbers in certain markets – particularly Spain and Greece. But traffic in France was down by 13%, Scandinavia by 20% and the UK by 28%, against the same period in 2019.

Traffic in North America continues to build, with charter flights showing as the most successful sector. In fact, six US states have seen charter activity at a higher level than 2019 – with Florida leading the charge with a 40% increase over 2019 levels. In another example, bizav flights out of New York airports are up by 60% on 2020 and are 4% above pre-pandemic levels.

## AVIATION SERVICES HUB:

Aviation finance

Despite the pandemic crisis that has overtaken the global economy, 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; whether it is new or pre-owned; the book value of the aircraft; 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.

## NBAA-BACE - face to face networking

NBAA-BACE is the world's largest business aviation event but instead of the in-person show scheduled for October last year, the National Business Aviation Association (NBAA) was instead obliged to hold a virtual event in December. This year, with vaccination levels increasing, NBAA-BACE will once again be held in-person and the omens are good as demand by exhibitors and attendees soars. NBAA-BACE 2021 is scheduled for 12-14 October in Las Vegas, where the event will occupy a new home in the West Hall of the Las Vegas Convention Centre. More than 90% of available exhibition floor space is already sold. In a recent survey, cited by the NBAA, 88% of respondents confirmed their intention to attend live events.

## Europe's virtual EBACE

In place of Europe's largest in-person business aviation event, organisers EBAA and NBAA held EBACE Connect, a virtual digital showcase that attracted more than 1,600 attendees over three days from 18 to 20 May. The aim of the event was to focus on the strategy required to rebuild the industry after the pandemic and to place sustainability at the heart of business aviation. EBACE Connect was opened by a keynote speech from 'aviation visionary' Erik Lindbergh, Executive Chairman of VerdeGo Aero which provides Powertrain Systems and Engineering Services to the emerging electric aircraft industry, who challenged business aviation to improve its sustainable credentials. This was followed by a 'town hall' session with CEOs of industry OEMs and a whole host of sessions focused on different aspects of business aviation and its challenges.

## Corporate aircraft news

On 21 May, Embraer Executive Jets announced the delivery of the 600th example of its Phenom 300 light twin jet to an Arkansas-based customer. The Phenom 300 first flew on 29 April 2008 and received approval from Brazilian regulator ANAC in December 2009. The aircraft recently became the world's best-selling light aircraft for the ninth year in a row and the most delivered twin-engine of 2020. Since making its debut, the Phenom 300 series has grown more than 7% per year.

The Brazilian manufacturer is looking to exploit the glut of former commercially operated ERJ-145 regional jets by offering a conversion programme to offer a 'semi-private cabin' to appeal to the corporate shuttle market. The rework will reduce seating from 50 to between 16 and 28 with a configuration of 1x1. Additional cabin space will be provided by the removal of overhead storage bins.

Japanese manufacturer Honda Aircraft has unveiled another upgrade to its HondaJet twin. The HondaJet Elite S will offer an increased MTOW, avionics improvements, an enhancement to nose wheel steering and a new paint scheme. The new version upgrades the original Elite, which was introduced in 2018. Honda Aircraft president and CEO Michimasa Fujino said the new enhancements were designed to "reduce pilot workload and enhance safety and efficiency".

Basel-based Jet Aviation has redelivered the first Boeing BBJ Max following a cabin reconfiguration. The aircraft was handed over to an undisclosed customer and is the first of a number of aircraft currently undergoing completion – including both BBJ2 Max and BBJ3 – that will be registered in the US, the Isle of Man, Aruba and the Cayman Islands.

Staying with the large cabin, airliner corporate jet, Airbus Corporate Jets has confirmed that the first fuselage for the ACJ TwoTwenty has arrived at the company's final assembly plant in Montreal. It is expected that the aircraft will be passed for cabin completion next year, with delivery in 2023. The ACJ TwoTwenty was unveiled as the latest member of the ACJ family – the corporate version of the Airbus A220-300 (formerly the Bombardier C Series) commercial airliner – on 6 October last year.

Duncan Aviation – 'the largest privately-owned business jet service provider in the world' – has been promoting the use of the 'hydrodipping' process for large components in aircraft cabins. It says the new process, which transfers a detailed 3D image to mimic fine wood grain, marble or other material, is more cost effective and also promotes sustainability. This is the latest example of the move towards the use of sustainable and carbon neutral materials and processes in aircraft interiors, as well as the more familiar drive towards sustainable fuels and increased operational efficiencies.



## AIRCRAFT FACT FILE \ \

### Cessna 172SP Skyhawk



#### CATEGORY

Light single piston

#### MANUFACTURER

Cessna, USA

#### ENGINE

1 x Lycoming IO-360-L2A piston

#### LENGTH

8.20 m

#### WINGSPAN

11.00 m

#### RANGE

959 km

#### MAX. SPEED

233 kmh

#### SEATING CAPACITY

4

#### NO. OF CREW

1

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

1,157 kg

#### DESCRIPTION

The Cessna 172 first flew in 1955 and remains in production today. More Cessna 172s have been built than any other aircraft – nearly 50,000 have been produced in total. By these two measures alone, longevity and popularity, the aircraft is the most successful in history. Textron Aviation, the manufacturer of Cessna aircraft, describes the 172 as "the ultimate training aircraft" – but it is far more than that.

The original Cessna 172 was a development of the tail dragger Cessna 170, which first flew in 1948. Since entering service eight years later, the 172 has been upgraded and developed through 19 different versions – each designated by a letter of the alphabet. The latest version, the 172S, is also known as the 172SP Skyhawk and is the only variant currently in production. The 172S, offered an increase in engine RPM and a higher MTOW than the 172R that preceded it. The latest production models include Garmin G1000 avionics, ADS-B Out and In and a leather interior as standard.