

Business aviation is moving toward an exciting and sustainable future

Global business aviation is evolving rapidly. Ed Bolen urges readers to see the transformation at an NBAA event



This is a very exciting time for the National Business Aviation Association (NBAA) and, indeed, the global business aviation community. More than ever before, we're seeing a number of emerging and growing trends in our community in such areas as supersonic transport, electronic propulsion and autonomous flight, along with an unprecedented level of innovation and excitement driving us forward to a bright and promising future.

For example, over the past few years we've seen a new transportation segment emerge alongside more traditional business aircraft and rotorcraft seen at NBAA-sponsored events. Urban air mobility (UAM) aims to revolutionize travel across large metroplexes, utilizing optionally piloted and even fully autonomous electric vertical takeoff and landing (eVTOL) vehicles to transport on-demand passengers and cargo.

This may seem within the realm of science fiction, but anyone who's ever dreamed of traveling above congested city streets may soon have their dreams realized, and possibly much sooner than they may think. In fact, many of these efforts were apparent throughout the recently concluded 2019 edition of NBAA's Business Aviation Convention & Exhibition (NBAA-BACE), which took place from October 22-24 in Las Vegas, NV.

The show placed new modes of transport, including UAM vehicles and unmanned aircraft systems (UAS), front and center in the all-new UAS/UAM Innovation Display Area. Several education sessions also addressed both the promise and challenges of implementing UAM, including the need for an advanced air traffic control infrastructure able to safely integrate UAM across urban airspace.

These hybrid gas-electric and, ultimately, fully electric designs offer the promise of safe and efficient travel within metropolitan areas around the globe, and even to the airport for longer-distance trips. NBAA also expects these

designs to ultimately complement traditional business aviation aircraft that are also moving toward more efficient operations and reducing our industry's already-low carbon footprint.

Sustainability is key to industry's future

The issue of environmental sustainability is a dominant theme not only in headlines around the globe, but also in the boardrooms and flight departments of companies using business aviation to improve their efficiency and competitiveness. That said, it's important to note these companies – along with aircraft and engine manufacturers, fuel providers and other stakeholders – have long sought to improve their own environmental footprint, and the efficiency of their products and operations.

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You may even be surprised to learn our industry's commitment to sustainability actually began more than 10 years ago, when business aircraft operators represented by the International Business Aviation Council joined with aircraft manufacturers and service providers to announce the Business Aviation Commitment on Climate Change, an aggressive program to continually reduce the industry's carbon footprint.

One of the most promising avenues toward fulfilling that commitment with today's business aircraft is through the use of sustainable aviation fuels (SAF) derived from renewable feed stocks that can reduce aviation's carbon lifecycle emissions by up to 80 percent.

Our industry's united support for SAF was first codified last year, as a coalition of international business aviation organizations joined government officials in Geneva to redouble their focus on advancing the development and adoption of SAF.

At the heart of this initiative is the *Business Aviation Guide to the Use of Sustainable Aviation Fuels (SAF)*, a resource focused on raising awareness that such fuels for business aviation are safe, approved and available now; that SAF offer myriad benefits, including those in support of the sustainability of business aviation, corporate responsibility and reduced emissions; and that such fuels are derived from several sustainable, renewable resources, and are therefore an environmental "win-win."

With the *Guide* spurring industrywide interest in sustainable aviation fuels, the next step in raising awareness and promoting education of its benefits came in January 2019, as IBAC joined with NBAA and a coalition of other industry groups to sponsor the first-ever SAF demonstration day at Van Nuys Airport (VNY) in Southern California to prove the fuels' viability and safety.

During the daylong *Business Jets Fuel Green: A Step Toward Sustainability* event, VNY's four fixed-based operators fueled aircraft throughout the day with SAF from suppliers World Fuel Services and Avfuel. Local officials expressed their support for this industrywide, all-voluntary, private investment in research and innovation, and numerous demonstration flights were conducted by business aircraft powered by SAF.

This impressive demonstration at Van Nuys paved the way toward the first European SAF demonstration day in May 2019, held at Tag Farnborough London Airport ahead of EBACE2019. A variety of business aircraft fueled up on SAF at Farnborough and other airports throughout Europe and the US for demonstration flights showcasing this fuel's viability.

These efforts culminated at 2019 NBAA-BACE with around two dozen aircraft fueling with SAF enroute to the show. Local civic and business leaders issued a proclamation recognizing the business aviation community's long-standing commitment to sustainability, with an estimated 150,000 gallons of SAF pumped into aircraft at Henderson Airport.

To further sustainability, NBAA joined with the General Aviation Manufacturers Association and other industry stakeholders to announce a new Business Aviation Global Sustainability Summit in Washington, DC in March 2020. A panel of industry leaders, in an 'I Want My SAF' forum, offered perspectives about increasing SAF availability and usage before a standing-room only audience.

Experience this excitement at future NBAA events

It's evident that our industry is embracing change across several fronts, and 2019 NBAA-BACE reflected this exciting time with the most exhilarating convention I believe NBAA has ever hosted. I also expect this energy and inspiration to carry forward to our upcoming events in the coming year.

Shanghai, China will host the Asian Business Aviation Conference & Exhibition from April 21-23, with the European Business Aviation Convention & Exhibition taking place in Geneva, Switzerland from May 26-28. The 2020 edition of NBAA-BACE, the largest event in the world dedicated to the business aviation industry, comes to Orlando, FL from October 6-8.

Our global business aviation community is in the midst of an unprecedented and thrilling transformation before our eyes, as new aircraft, technologies and practices take hold, showcasing the innovation and sustainability of our industry. I encourage readers of *World Commerce Review* to see what this promising future holds, and experience this evolution firsthand, at an NBAA event in 2020. ■

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