

Boom Supersonic Showcases Milestones at 2019 Paris Air Show

Company announced plans to roll out XB-1 demonstrator aircraft in 2019, new supplier partnerships and sustainable alternative fuel partnership with Prometheus Fuels

Paris, France — June 18th 2019: Boom Supersonic (Boom), the Colorado company building history's fastest commercial airliner, today showcased its key strategic milestones during a press conference held at the Paris Air Show. During the conference, Boom founder and CEO Blake Scholl, joined on stage by Takeshi Morita, Director, Business Creation Strategy Department at Japan Airlines—a strategic partner and investor in Boom—reviewed the company's plans for rolling out XB-1, its two-seat supersonic demonstrator aircraft, in December 2019, with supersonic flight planned for 2020. Japan Airlines' presence at the Paris Air Show is representative of the world-class calibre partners Boom has attracted to help fulfill its vision to make the world dramatically more accessible.

“Boom has experienced great success on its journey towards building a new generation of airliner that will transform the travel experience across the globe,” said Blake Scholl, Founder and CEO of Boom. “Today, we have the advanced technology to realize faster air travel, and our teams have been working tirelessly over the past few years to build the first civil supersonic plane since Concorde. Our continued strategic partnership with Japan Airlines as well as new partnerships are a testament to our commitment to make supersonic flight a reality. We're excited to participate in our second Paris Air Show and to be here sharing our progress toward a faster future.”

Boom was founded with the purpose of removing barriers to experiencing the planet, and to realize this vision, it is building Overture, the first new supersonic commercial jet to emerge in 50 years. Overture allows airlines to offer a revolutionary service to passengers while earning superior economic performance relative to current aircraft in an environmentally sustainable way.

Japan Airlines (JAL), an early investor in Boom that committed \$10m in 2017 and has options on 20 Overture airliners, joined the stage with Boom. JAL is a strategic partner for Boom in the development of Overture, and the two companies are working closely to help make Overture an aircraft that meets JAL's exacting operational needs, while also providing the highest level of client service. Over the past several months, teams from JAL and from Boom have collaborated in Denver and in Tokyo to review aspects of JAL's operations, so that Boom engineers can understand the environment in which Overture will fly.

XB-1 Roll Out

XB-1 will roll out of Boom's hangar in December and fly supersonically in 2020. This important milestone will provide Boom with critical learnings and will continue to yield experiences and data that will support the development of Overture; this data will influence the aerodynamic design and calibration, stability and control, evaluation of handling qualities and development of propulsion inlet, nozzle and control systems.

Over the past 12 months, Boom has made critical engineering and production milestones^[1] in the development of XB-1, including:

- XB-1 aerodynamic design validation
- Engine operability testing
- Alternative fuel engine testing
- Supersonic inlet wind tunnel testing
- Full range flight telemetry system testing
- Spin tunnel testing
- Fully comprehensive aero database generation
- All systems verified to meet safety goals
- Completion of forward fuselage and wing skin tools

Company Updates

Boom has added a second top test pilot to its team, Chris 'Duff' Guarente, who holds a Master's of Flight Test Engineering from the USAF Test Pilot School and who recently flew the historic Stratolaunch first flight. Guarente joins Bill 'Doc' Shoemaker, who has been providing guidance in the development of XB-1 since joining Boom in 2018. Doc's expertise and insights have proven invaluable to the development process, providing specific guidance in cockpit layout and human factors input, systems design and operation, flight control system requirements, qualities requirements generation and review, and flight simulator requirements and development. 'Doc' holds a PhD in aeronautics and was a Navy F-18 pilot and a veteran test pilot.

Sustainable Fuel Partnership with Prometheus

In keeping with Boom's commitment to mitigating environmental impacts of supersonic travel, Scholl announced a new partnership with Prometheus, one of the most innovative companies in the field of sustainable alternative fuels. Prometheus' technology economically removes CO₂ from the air and uses clean electricity to transform it into gasoline, diesel and jet fuel. The electricity used in this process is generated from alternative sources, such as wind and solar power, meaning there are no net CO₂ emissions generated throughout the process. Because the fuel is made from atmospheric CO₂, it is carbon neutral when burned, releasing no net carbon into the air. Boom plans to use Prometheus fuel to power XB-1 in the world's first supersonic flight using carbon-neutral fuel.

New Supplier Partnerships

In 2019, Boom has also announced several important strategic partnerships. In addition to the collaborations with JAL and Prometheus, Boom's work on Overture is strengthened by ongoing partnerships with the top suppliers in the industry. Recent news has included strategic partnerships with:

Dassault Systèmes - Using its 3DEXPERIENCE platform to accelerate the design and development of Overture.

JPA Design - Collaborating to re-imagine the customer experience and design the aircraft interior.

Stratasys - Extending its partnership to 3D print crucial polymer-based parts for XB-1 and Overture.

[1] For more details, please refer to 'Note to Editors' at the bottom of the press release.

-ENDS-

Note to Editors:

Details of the critical engineering and production milestones achieved in the development of XB-1:

- XB-1 aerodynamic design validated, enabling the teams to start the detailed design and analysis of the aircraft.
- Engine operability testing, conducted in partnership with the United States Air Force Academy, gave the team valuable hands-on experience with the engine. The performance not only exceeded company predictions, but also informed the process for engine reactivation during XB-1 flight tests.
- Alternative fuel engine testing allowed Boom to plan to minimize the carbon impact of supersonic flight by operating the demonstrator engine with a pure biofuel formulation. There was no loss in hardware integrity even when using pure, unblended alternative fuel with a legacy engine that had been in storage for decades. There have been many demonstrations of alternative fuel in aircraft engines, but this ranked among the most aggressive in history to date, in that a pure alternative fuel was used in a military engine up through maximum afterburning.
- Supersonic inlet wind tunnel testing, demonstrating that the inlet performance required by XB-1 to reach Mach 2.2 flight speed is achievable and providing data to help guide the design of Overture. In the wind tunnel, Boom's design exceeded the performance of Concorde's inlets.
- Full range flight telemetry system testing proved Boom can successfully support a 2-way data link for XB-1 testing up to 200 miles away. The engineering team proved the system works to a greater distance and is designed for XB-1's unique altitude and airspeed regimes. The learning will apply to the development of Overture.
- Spin tunnel testing, which reduces the risk in flight test by better understanding the departure modes of the aircraft.
- Fully comprehensive aero database generation performing more than 1,300 aerodynamic flow simulations over a broad band of flight conditions, allowing for accurate predictions in aircraft handling characteristics and mission performance.
- All systems verified to meet safety goals. Understanding how the aircraft systems will interact, not only when they are functioning properly but during predictable and unpredictable failures is key to verifying that the design of the aircraft is safe. All aircraft systems meet the program reliability goals.
- Forward fuselage and wing skin tools are complete as well as the nose landing gear subassembly. The bonding for the cockpit subassembly will be complete this week, and the team has nearly finished laminating all of the spars to move into trimming and drilling.



12876 E ADAM AIRCRAFT CIR,
ENGLEWOOD, CO 80112

PRESS@BOOMSUPERSONIC.COM

About Boom Supersonic

Boom is redefining what it means to fly by building Overture, history's fastest commercial airliner. Boom's vision is to bring families, businesses, and cultures closer together through supersonic travel and make the world dramatically more accessible. The company is backed by world-class investors and has 30 aircraft on pre-order from Japan Airlines and Virgin Group. Founded in 2014, Boom has assembled a world-class team of over 130 full-time employees who have made contributions to over 130 air and spacecraft companies. For more information, please visit <https://boomsupersonic.com>.

Press Contacts

Boom Supersonic

Paris Air Show

Corporate / USA

Mohaned Mahgoub

Dan Mahoney

Mohaned@tohpr.com

press@boomsupersonic.com

+971553312139 / +32483071875

+1 (720) 726 5457