

# Spike Aerospace's Supersonic design being validated in test flights

*Aerospace testing international*

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Spike Aerospace successfully test flew the subsonic subscale SX-1.2 demonstrator aircraft for the first time on the morning of Saturday, October 07, 2017. The jet is an early unmanned prototype of the company's 18 passenger S-512 Quiet Supersonic Jet.

The SX-1.2 test flights proved that the aerodynamic design of the aircraft is valid and provided a tremendous amount of data regarding the flight characteristics of the aircraft. In total, seven short flights were performed to test the design and flight controls of the jet. Between each test flight, adjustments were made to the aircraft's center of mass, balance and control surfaces. Additional performance data was observed and collected.

KrishnaKumar Malu remote piloted the aircraft, assisted by Mike Ridlon, from a private airfield in New England. "These test flights are providing incredibly valuable information which we can use to refine the design. I am very excited about how helpful these tests will be to our supersonic development program," Malu said.

Vik Kachoria, president and CEO, said "The SX-1.2 test flights were conducted in a real-world situation, and provide significantly more data than wind tunnel tests done in an artificial environment. We were able to test not only handling, but also a range of other considerations."

The company is planning to make additional modifications based on data collected from the initial tests and will conduct more test flights on the SX-1.2 in early November. Work on SX-1.3, the next in the demonstrator series, has also begun.

Spike intends to have the S-512 aircraft flying by early 2021, with customer deliveries beginning in 2023. The S-512 will seat up to 22 passengers, with a range of 6,200 miles (9,977km) and a cruise speed of Mach 1.6, saving 50% on flight times. And due to the aircraft's low-boom signature, it will be able to fly overland without creating disturbing sonic booms.