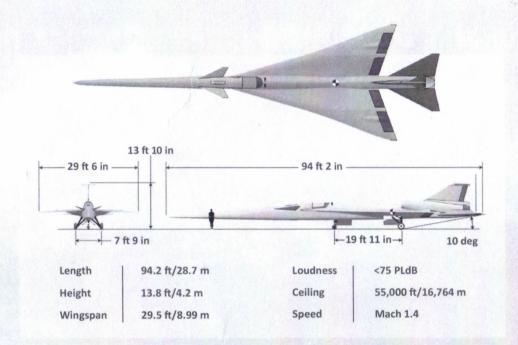
## Supporting NASA's Mission to Make Flight **Greener, Safer and Quieter**

Lockheed Martin has worked with NASA for more than a decade to develop modern design tools and validation methods needed to make the next generation of environmentally responsible commercial supersonic aircraft a reality. These previous efforts have confirmed that the technology is now available to solve one of the persistent challenges of supersonic flight — the sonic boom. The Quiet Supersonic Technology (QueSST) X-plane demonstrator is the next step in the path towards this quiet supersonic future.





NASA selected a team led by Lockheed Martin to complete a preliminary design for the QueSST X-plane.

The QueSST program supports NASA's Commercial Supersonic Technology Project, which aims to generate the shaped sonic boom acceptability data required by regulators to develop supersonic overland noise standards. The QueSST X-plane accomplishes this by tailoring the volume and lift distribution to separate the shocks and expansions associated with supersonic flight. The resulting supersonic "heartbeat" is dramatically quieter than the disruptive N-wave boom generated by today's supersonic aircraft. We look forward to supporting NASA in the effort to obtain the data regulators will need to make informed decisions on appropriate sonic boom levels in the quest to remove the prohibition on supersonic overland flight.