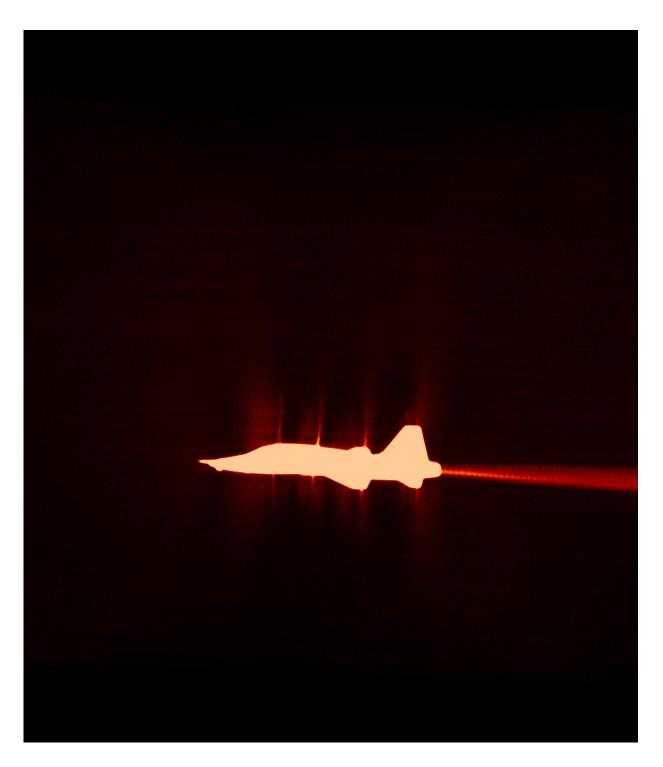


Image: Seeing an X-plane's sonic boom

December 19 2017





Credit: NASA



When NASA's next X-plane takes to the skies, it will produce some pretty cool images.

Thanks to the completion of a recent flight test series at NASA's Armstrong Flight Research Center in California, the agency is a step closer to being able to visually capture the shockwaves of NASA's future Low Boom Flight Demonstration aircraft, or LBFD.

In this schlieren image, an Air Force Test Pilot School T-38 is shown in a transonic state, meaning the aircraft is transitioning from a subsonic speed to supersonic. Above and beneath the aircraft, shockwaves are seen starting to form. These shockwaves propagate away from the aircraft and are heard on the ground as a sonic boom. NASA researchers use this imagery to study these shockwaves as part of the effort to make sonic booms quieter, which may open the future to possible supersonic flight over land.

Provided by NASA

Citation: Image: Seeing an X-plane's sonic boom (2017, December 19) retrieved 18 April 2024 from https://phys.org/news/2017-12-image-x-plane-sonic-boom.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.