

NASA image: T-38C passes in front of the sun at supersonic speed

April 13 2016



Credit: NASA/Ken Ulbrich



An Air Force Test Pilot School T-38C passes in front of the sun at a supersonic speed, creating shockwaves that are caught photographically for research.

NASA is using a modern version of a 150-year-old German photography technique — schlieren imagery — to visualize supersonic flow phenomena with full-scale aircraft in flight. The results will help engineers to design a quiet supersonic transport.

Although current regulations prohibit unrestricted overland supersonic flight in the United States, a clear understanding of the location and relative strength of <u>shock waves</u> is essential for designing future high-speed commercial aircraft.

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