

# Unmanned US military hypersonic craft failed

August 15 2012

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In this July 17, 2009 photo provided by the U.S. Air Force, an X-51A WaveRider hypersonic flight test vehicle is uploaded to an Air Force Flight Test Center B-52 for fit testing at Edwards Air Force Base. Four scramjet-powered Waveriders were built for the Air Force. The Los Angeles Times says the unmanned X-51 WaveRider is expected to reach Mach 6 \_ or about 3,600 mph \_ Tuesday, Aug. 14, 2012, when it's dropped by a B-52 bomber and takes flight off the Southern California coast near Point Mugu. (AP Photo/U.S. Air Force, Chad Bellay)

An unmanned experimental U.S. aircraft failed during an [attempt to fly at six times the speed of sound](#) in the latest setback for hypersonic flight.

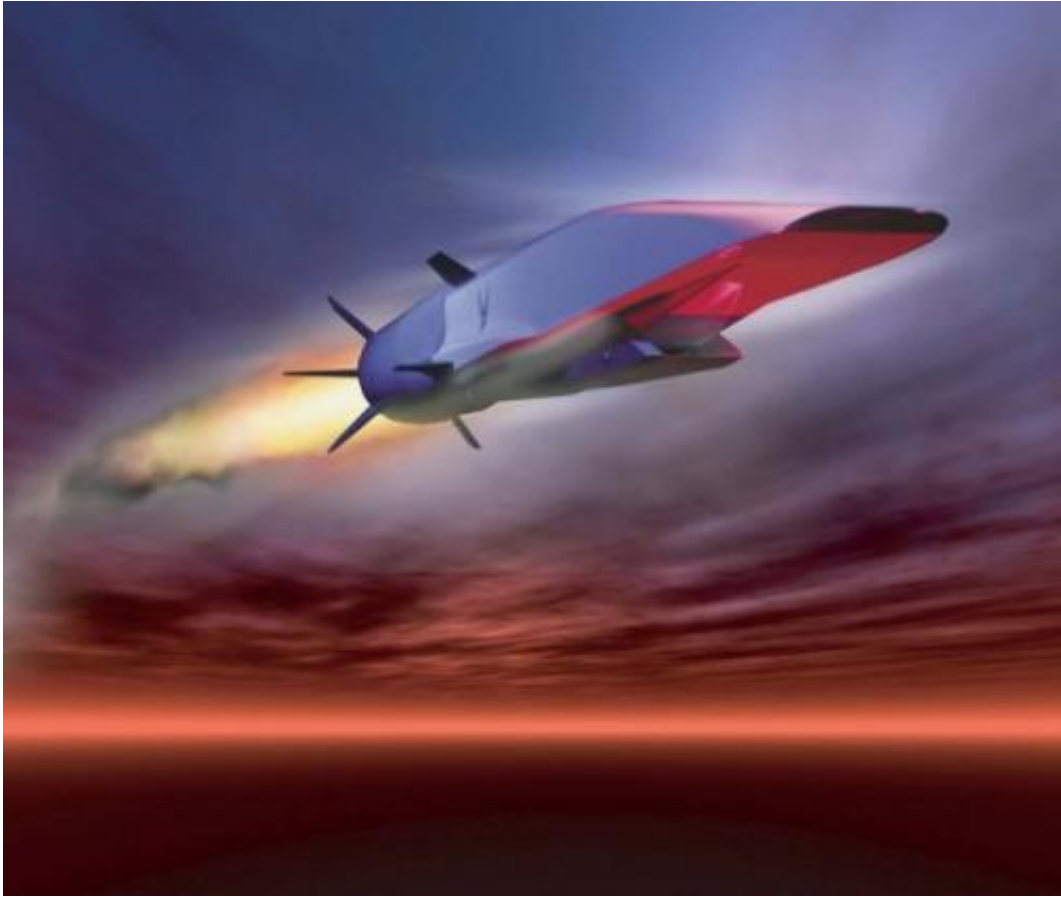
The X-51A Waverider was designed to reach Mach 6, or 3,600 mph (5,800 kph), after being dropped by a B-52 bomber off the Southern California coast on Tuesday. Engineers hoped it would sustain its top speed for five minutes, twice as long as an X-51A has gone before.

But the Air Force said Wednesday that a faulty control fin prevented it from starting its exotic scramjet engine and it was lost.

"It is unfortunate that a problem with this subsystem caused a termination before we could light the scramjet engine," Charlie Brink of the Air Force Research Laboratory at the Wright-Patterson Air Force Base in Ohio, said in a statement.

The Waverider successfully detached from the B-52 and fired the rocket booster as planned. Then its scramjet engine was supposed to take over as it attempted to climb to Mach 6. But that never happened. Fifteen seconds after separating from the rocket booster, the Waverider lost control, preventing a test of the scramjet engine.

"All our data showed we had created the right conditions for engine ignition and we were very hopeful to meet our test objectives," Brink said.



This undated US Air Force illustration shows the X-51A Waverider. A flight test of an experimental unmanned vehicle designed to fly at hypersonic speeds has ended in failure, the US Air Force said Wednesday.

The Pentagon has been testing hypersonic technologies in hopes of delivering strikes around the globe within minutes.

It was the latest failure for the Waverider program. A test flight last year ended prematurely with an X-15A trying to restart its engine until it plunged into the Pacific Ocean.

During the first flight of an X-51A in 2010, it reached near five times the speed of sound for three minutes.

There's only one X-51A vehicle left. The Air Force has not decided whether it will fly.

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Citation: Unmanned US military hypersonic craft failed (2012, August 15) retrieved 9 April 2024 from <https://phys.org/news/2012-08-unmanned-military-hypersonic-craft.html>

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