Experimental Air Force aircraft goes hypersonic

The Associated Press

LOS ANGELES (AP) — An experimental, unmanned aircraft developed for the U.S. Air Force went hypersonic during a test off the Southern California coast, traveling at more than 3,000 mph, the Air Force said Friday.

The X-51A WaveRider flew for more than three minutes under power from its exotic scramjet engine and hit a speed of Mach 5.1, or more than five times the speed of sound.

The test on Wednesday marked the fourth and final flight of an X-51A by the Air Force, which has spent $300 million studying scramjet technology that it hopes can be used to deliver strikes around the globe within minutes.

The previous three flights ended in failure or didn't reach the intended speed.

Though the WaveRider was designed to reach Mach 6, or six times the speed of sound, program officials were satisfied with its performance in the latest test.

"It was a full mission success," program manager Charlie Brink of the Air Force Research Laboratory at Wright-Patterson Air Force Base said in a statement.

The sleek, missile-shaped WaveRider was released from a B-52 bomber 50,000 feet above the Pacific and was initially accelerated by a rocket before the scramjet kicked in.

It reached Mach 4.8 in less than half a minute powered by a solid rocket booster. After separating from the booster, the scramjet engine was ignited, accelerating the aircraft to Mach 5.1 at 60,000 feet.

The flight ended with a planned plunge into the ocean.

The WaveRider traveled more than 230 miles in six minutes, making it the longest hypersonic flight of its kind. Engineers gathered data before it splashed down.

Darryl Davis, president of Boeing Phantom Works, which built the WaveRider, called the test "a historic achievement that has been years in the making."

"This test proves the technology has matured to the point that it opens the door to practical applications," Davis said in a statement.

While the Air Force did not have immediate plans for a successor to the X-51A, it said it will continue hypersonic flight research.

Source URL (retrieved on *09/17/2014 - 8:22am*):
http://www.ecnmag.com/news/2013/05/experimental-air-force-aircraft-goes-hypersonic