



0. EXPERIMENTAL PLANES - Story Preface

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Tech. Sgt. Michael Haggerty took this photo of an SR-71 in flight on the 1st of June, 1988. Online courtesy the US Air Force, the image has this description: "An air-to-air overhead front view of an SR-71A strategic reconnaissance aircraft. The SR-71, unofficially known as the 'Blackbird,' is a long-range, advanced, strategic reconnaissance aircraft developed from the Lockheed A-12 Oxcart and YF-12A aircraft. The United States Air Force retired its fleet of SR-71s on Jan. 26, 1990, but returned them in 1995 until January 1997. Throughout its nearly 24-year career, the SR-71 remained the world's fastest and highest-flying operational aircraft. Location: Beale Air Force Base, California, USA. Evaporating fuel can be seen streaking down the fuselage and top of the wings from the aerial refueling port aft of the cockpit."

As World War II was ending, the United States conceived "The Research Airplane Program." Its purpose, among other things, was to see how experimental planes performed under extreme conditions.

The test pilots who flew such planes had to be made of "The Right Stuff." They tested various ranges of speed to help designers develop safer aircraft. Their daring flights helped other pilots determine how fast they could safely fly.

The program ultimately led to the fastest airplane which ever flew - the SR-71 (also known as "The Blackbird"). Developed by a team of Lockheed personnel known as the "Skunk Works," the SR-71 was designed for speed and reconnaissance (without weapons).

If hostile forces came upon the Blackbird, its defense was to fly away using its maximum speed (2,268 miles per hour) to reach its maximum height (16 miles up).

One of the early test pilots - whose pioneering efforts paved the way for Lockheed to create a plane like the SR-71 - was Charles ("Chuck") Yeager. Known for his feats of flying bravery and accuracy during the war, he had become a legend to the men who served with him.

No one had ever flown a plane at (or above) the speed of sound when Chuck Yeager joined the Research Airplane Program. Planes which approached the speed of sound had encountered new flight issues: drag increased sharply, planes shook violently, and lift and control were lost. Many planes approaching the speed of sound broke apart and crashed.

There seemed to be a kind of "sound barrier" through which planes could not fly.

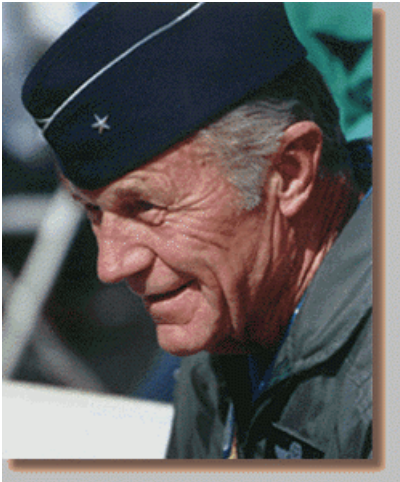
See Alignments to State and Common Core standards for this story online at:

<http://www.awesomestories.com/asset/AcademicAlignment/EXPERIMENTAL-PLANES-History-of-Flight>

See Learning Tasks for this story online at:

<http://www.awesomestories.com/asset/AcademicActivities/EXPERIMENTAL-PLANES-History-of-Flight>

Media Stream



Chuck Yeager

Image online, courtesy the Air Force Test Center History Office.

View this asset at: <http://www.awesomestories.com/asset/view/Chuck-Yeager>



EXPERIMENTAL PLANES

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Experimental Planes and Test Pilots

From The Right Stuff, a film about test pilots and the Mercury 7 astronauts.

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