

West Virginia Archives and History

ON THIS DAY IN WEST VIRGINIA HISTORY OCTOBER 14



Lincoln County native Chuck Yeager broke the sound barrier on October 14, 1947.

CSO: SS.8.25, ELA.8.1

| Investi | igate the Document: (The Charleston Gazette, December 22/23, 1947) | |
|---------|--|-----|
| 1. | The speed of sound is generally at what speed? It varies due to | and |

- 2. Chuck Yeager is world-renowned for being the first person to break the sound barrier, but he was also joined by another West Virginian, ______ from _____ shortly after.
 - 3. How many planes did Yeager shoot down during combat in the European Theater of World War II? What did he receive a Silver Star for?

<u>Think Critically:</u> Describe how a sonic boom occurs. How did Yeager's groundbreaking achievement change aviation? Did West Virginia make significant industrial contributions to the war effort as well? If so, explain.



West Virginia Archives and History

The Charleston Gazette

The State Newspaper-Member of the Associated Press

Charleston, West Virginia, Monday Morning, December 22, 1947

Army Rocket Plane Breaks Sound 'Barrier' With Little Difficulty

WASHINGTON, Dec. 21—67—Aviation Week will say in an iasue dated tomorrow that an experimental rocket plane, the Bell XS-1 has flown faster than the speed of sound on several occasions during the past month.

There have been persistent rumore that the sonic barrier had been breached by the SX-1 but Defense Secretary Forrestal forbede any official disclosure under security regulations issued specifically to cover Air Force progress in high speed flight.

The speed of sound generally is stated as 760 miles an hour, but this relates to standard conditions

The speed of sound generally is stated as 760 miles an hour, but this relates to standard conditions of 50 degrees Fahrenheit at sea level altitude. The speed of sound varies up to 100 miles an hour in either direction as the temperature rises or descends.

Aviation Week will say that the

Aviation Week will say that the first flight faster than sound was made at Muroc Air Base, Cal, more than a month ago by Capt. Charles Yaeger and that since

then the speed has been duplicated several times by Yaeger and test pilots Howard Lilly and Herbert Hoover of the National Advisory Committee for Aeronautics, the government's top aviation research agency.

The S-I which is powered by 4 rocket motors and is launched from the belly of a B-29 was built as an experimental aircraft in a cooperative effort between the Air Force and NACA. At the time it was first announced, the Air Force said it was expected eventually to reach speeds of 1,700 miles an hour.

The magazine said the XS-1 had been timed by radar and had flown at altitudes of 40,000 to 70,-

The biggest surprise of the littie plane's achievement, Aviation Week says, is the absence of numerous anticipated difficulties near the speed of sound, the so-called

(Picase Turn to Page 17 Col. 4)

Army Rocket

(Constanued From Page 1) trans-sonic range, where the mixed flow of air at sub-sonic and super-sonic speeds is encountered.

The magazine said that a "revolution" in high speed aircraft design is anticipated as a result of the XS-1 flights, adding that Republic, Lockheed, McDonnell and Consolidated Vultee aircraft companies already are re-designing interceptor fighters which they are building for the Air Force.

Robert H. Wood, editor of Aviation Week, told a reporter that he had withheld the story for several weeks at the request of Air Force officials and with the understanding that the Air Force also would withhold it. He decided to release the story, he said, after Aviation Week had learned that the Air Force is preparing a release on the fact that the XS-1 has exceeded the speed of sound. (An Air Force spokesman said today that it is not preparing such a release.)

Wood said he feels that national security is no more endangered by releasing the story today than it would be in two or three weeks.



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The Charleston Gazette

Charleston, West Virginia, Tuesday Morning, December 23, 1947

Two State Fliers Snap Sonie Wall

Two small town West Virginia fliers were identified by Aviation Week magazine yesterday as the first pilots to fly the Army's highly secret experimental rocket plane faster than the speed of sound. The magazine said that Capt. Charles Yeager, 24-year-old Army World War II ace from Hamlin, Lincoln county, W. Va., first breached the sonic barrier more than a month ago.

ed the sonic parrier more than a month ago.

Similar flights were made by Howard (Tick) Lilly, 31-year-old test pilot for the National Advisory Committee of Aeronautics, the magazine said. His home is in the tiny Raleigh county community of Beaver, W. Va., near Beckley.

Capt. Yeager was known by the

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Two State Fliers

Lilly is an ex-junkyard datby racer of jalopy automobiles who learned to fly under the civilian air pilot training program at the Beckley airport in 1946.

He served as a Navy pilot for a year and then became a test pilot for the Committee on Arsonautics in 1942. Lilly has had considerable experience testing jet propulation planes, and among other ships, has flown the Douglas D-568 Skystreak which reached a speed of 662 miles per hour earlier this year.

Lilly, unmarried, graduated from Shady Spring high school, and attended Concord and Beckley colleges. He formerly was employed as a pressman by the Beckley Newspapers, and as a sterreotyper for the Charleston Gazette.