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

Investigate 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?

Think Critically: 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.
Army Rocket Plane Breaks Sound 'Barrier' With Little Difficulty

WASHINGTON, Dec. 21.—(P)—Aviation Week will say in an issue 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 rumors that the sonic barrier had been breached by the XS-1, but Defense Secretary Forrestal forbade 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 700 miles an hour, but this relates to standard conditions of 59 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 first flight faster than sound was made at Muroc Air Base, Calif., more than a month ago by Capt. Charles Yenger and that since then the speed has been duplicated several times by Yenger and test pilots Howard Lilly and Herbert Hoover of the National Advisory Committee for Aeronautics, the government's top aviation research agency.

The XS-1 which is powered by 6 rocket motors and is launched from the belly of a B-50 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 70,000 feet.

The biggest surprise of the little plane's achievement, Aviation Week says, is the absence of numerous anticipated difficulties near the speed of sound, the so-called 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.
Two State Fliers
Snap Sonic 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, 21-year-old Army World War II ace from Hamlin, Lincoln county, W. Va., first breached the sonic barrier more than a month ago.

Similar flights were made by Howard (Tiek) Lilly, 21-year-old test pilot for the National Advisory Committee on 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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