

632 M.P.H. to a Stop in 1.5 Seconds

Officer in Rocket Sled Sets Record—Gets Black Eyes in Halt

By The United Press.

WASHINGTON, Dec. 27—Lieut. Col. John P. Stapp has slammed to a stop in a rocket sled in one and a half seconds after attaining a record land speed of 632 miles per hour.

The Air Force officer suffered no lasting ill effects in his dash. However he did receive small blood blisters from dust particles on the record run and two black eyes when his eyeballs pressed against the lids at the end of the ride.

The quick-stop tests were conducted recently at the Holloman Air Development Center, Alamogordo, N. M., in efforts to discover the effect on airmen who bailed out of planes at supersonic speeds.

Colonel Stapp was strapped to the 2,000-pound tubular steel rocket sled, which was mounted on steel rails embedded in concrete.

His 632-mile-per-hour speed exceeded his own previous record of 421 miles an hour set on the same sled at Alamogordo earlier this year.

The Air Force said that Colo-

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Last-minute adjustments are made by Air Force and Northrop technicians to secure Lieut. Col. John P. Stapp to his seat before the high-speed run. Tests were made to determine effects on airmen who bail out at supersonic speeds.

ROCKET SLED SETS MARK OF 632 M.P.H.

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nel Stapp, in his stop, withstood a pressure equal to thirty-five times his own weight. That would make him "weigh" more than three tons.

The sled was stripped of its windshield to obtain increased speed. Colonel Stapp wore no special protective clothing, but did have a plastic helmet and a clear plastic visor to protect his head and face.

After an examination at the Holloman Hospital, Colonel Stapp had lunch and began to study the data on his test.

The Air Force said that at Holloman's 4,100-foot altitude, Colonel Stapp's speed of 632 miles per hour was equal to more than 1,000 miles an hour at a jet airplane's normal cruising altitude of 35,000 feet.

The sled reached its top speed from a standing start in five seconds after covering 2,800 feet. It coasted for about half a second and braking took a second.

Colonel Stapp, chief of the Aero-Medical Field Laboratory at the Holloman Air Development Center, received the National Air Council's award for outstanding achievement in aviation medical research in 1951.

The Air Force has said that test runs on the sled eventually will be made at speeds up to 800 miles an hour, about fifty miles an hour faster than the speed of sound at sea level.

Wore a Nylon Harness

ALAMOGORDO, N. M., Dec. 27 (P)—Colonel Stapp set his record in a rocket sled built by the Northrop Aircraft Corporation. The sled was propelled by the 2,000-pound thrust of nine rockets. The colonel was strapped to his seat by a nylon web harness on his shoulders, legs, chest and arms.

Blacked Out at Start

LOS ANGELES, Dec. 27 (P)—The announcement today reported that Colonel Stapp, who has both M. D. and Ph. D. degrees, made the rocket sled test on Dec. 10.

In the acceleration phase the officer was subjected to about nine G's, or nine times the pressure of gravity. It blacked out his eyesight for about two seconds shortly after the run began. From top speed to complete stop, the 44-year-old scientist was subjected to an average of twenty-seven G's for a little more than a second, jamming the blood to the forward part of his head.

"From blackout and sightlessness," he said in a telephone interview today, "I saw bright yellow and then vivid reds. The pain was intense, so intense that

I recall very little of the G pressure in stopping."

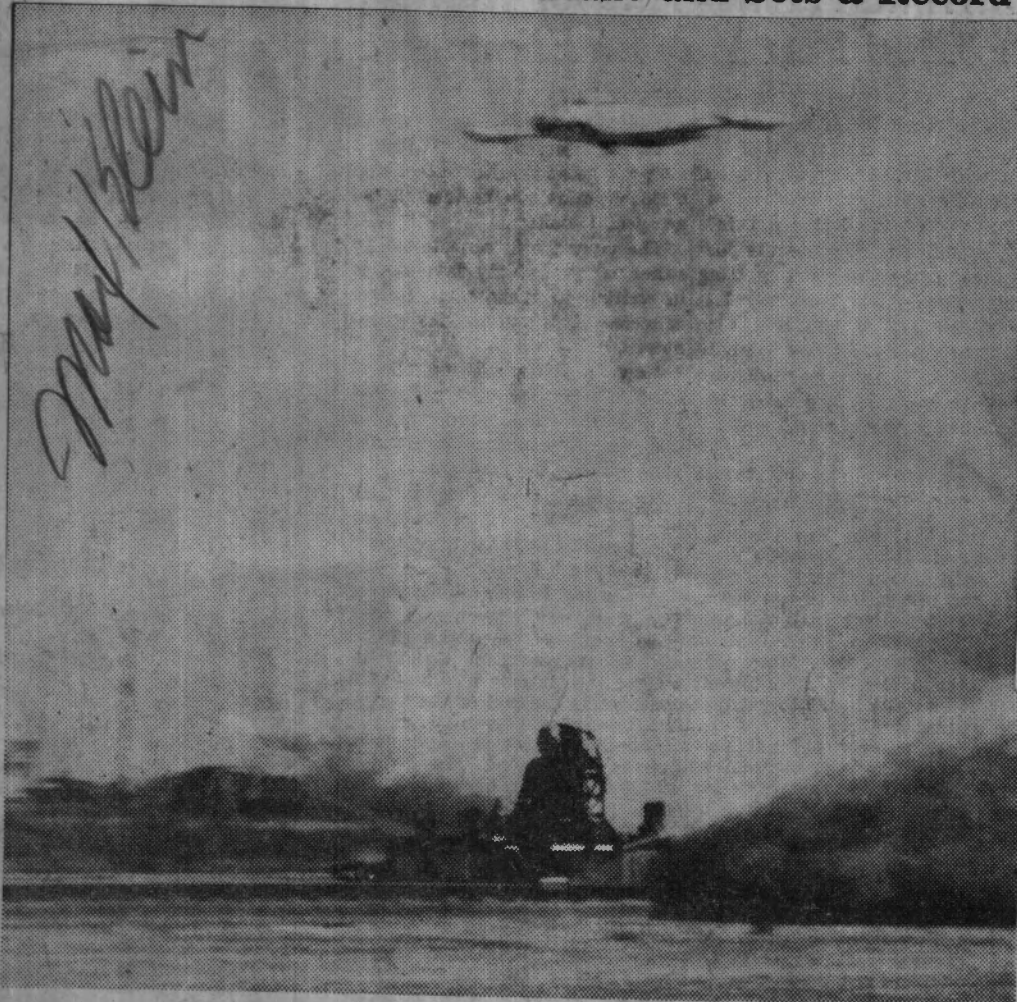
He said the "redout" and pain in his eyes continued about eight and one-half minutes, and left "the most beautiful pair of shiners you ever saw."

Colonel Stapp's speed of 632 m.p.h. was more than nine-tenths the speed of sound at the air development center. Sonic speed at the 4,300-foot altitude there is 714 m.p.h.

At the end of the acceleration phase the sled separates from the power unit. Colonel Stapp said it came to a stop just thirty-two feet from the end of the track.

Although Colonel Stapp had been scheduled to hold a press conference here today to describe his speedy run, it was postponed until tomorrow. The reason—he had car trouble twenty miles from Los Angeles and could not get here in time.

Rocket Sled Overtakes Jet Plane and Sets a Record



PUTTING ON THE BRAKES: With Lieut. Col. John P. Stapp in the seat, this Northrop-built rocket sled hit a record land speed of 632 miles an hour during recent tests at the Holloman Air Development Center, Alamogordo, N. M. At time rocket was fired, the plane was ahead of the sled but was overtaken and passed. Here aircraft catches up as the sled enters the braking area. Water spraying out behind was caused by water-braking system.

J.P. Stapp
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