

Those frightening explosions you may have heard — or heard of

## The Truth About the "Sonic Boom"

Condensed from The Saturday Evening Post

Corey Ford

*Dick Johnson - over*

**O**N JANUARY 6, 1951, at 11:08 a.m., Los Angeles was rocked by a mysterious explosion. Investigation revealed no sign of a dynamited building or shattered gas main.

A similar unaccountable explosion occurred in Dallas, on February 25, 1952. The sheriff's department promptly instituted a search for some skulking nihilist believed responsible for four previous blasts that had terrified the city.

During the ensuing months the elusive "ghost bomb" — the newspapers already had a name for it — struck other communities from coast to coast without warning. Houses were jolted in the San Francisco area, and the frightened occupants were convinced that an earthquake had occurred. Nassau County in New York suffered a near-panic when the eerie missile exploded over Long Island with "thunderous force."

Chicago was the victim of a mid-morning explosion that started wild rumors of a fallen flying saucer. Tacoma, Wash., reported plate-glass windows broken; Ottawa, Canada, was hit with such concussion that plaster showered down over housewives working in their kitchens; when Boston was shaken, sight-seers in search of a crashed airliner caused one of the worst traffic jams in history.

What our startled cities have been hearing — a sound we must be prepared to hear more and more from now on — is the so-called sonic boom, latest and least understood phenomenon of the air age we live in. When a jet airplane flies faster than the speed of sound, it sets in motion an impulse similar to the bow wave of a motorboat. The plane may be eight miles high and invisible to the naked eye — a fact which accounts for much of the ghost-

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craft never anticipated the possibility that the shock waves would have any such explosive effect. Aeronautical experts were as baffled as the rest of the public by the early newspaper scareheads about the ghost bomb. The solution of the mystery was accidental.

In March 1950, Lt. Col. Richard Johnson was performing a routine series of experimental dives at Wright Air Development Center near Dayton, Ohio. He was flying the F-86A, entering his dives at 43,000 feet. In order to establish the same path on each dive, a radar-tracking technique was used. After the first dive, the radar operator called Colonel Johnson abruptly and requested him to terminate his mission; there had been an explosion inside the radar shack. A lengthy investigation failed to reveal any sign of damage.

Again Johnson dived his F-86A through the sonic barrier, and again the bewildered radar operator reported an explosion and asked him to land. By this time, Johnson and other observers had begun to suspect a connection between the dives and the blasts. He made four more tests along the same dive path; four more explosions resulted.

Colonel Johnson returned to his home in a near-by suburb, where he found his wife pacing the sidewalk excitedly in front of their house. While he'd been off flying today, she informed him, the neighborhood had been rocked by six separate dynamite blasts, and local police and fire departments were searching high

and low for the guilty party. Colonel Johnson mumbled something about hoping they'd apprehend the miscreant promptly, and slunk indoors.

Today official Air Force tests are conducted over the desert or open water, and any eager jet jockey who attempts a sonic buzz job over a populated district is subject to severe disciplinary action.

There have been no known cases of adverse physiological effects on human beings from the sonic boom, save from fright or shock. There have been instances of harm to livestock panicked by the sudden blast. At a poultry farm in the West, a sonic boom caused several hundred chickens to pile up in a corner of the pen and smother to death. Cattle on the range have been stampeded, gashing themselves against barbed wire. Losses have been reported by the owners of mink farms, when the nervous females, alarmed by the boom, killed their young.

On one point all the experts agree: the sonic boom is here to stay. Flight regulations can control its force, but there is no way to eliminate it completely. A boom generated in a shallow dive has been heard as far as 50 miles away.

The aviation industry and the Air Force are taking every possible precaution to prevent unnecessary trouble for communities. The most serious danger lies in panic. Instead of fearing the sonic boom, they urge, the public should hail the sound as convincing proof that we have modern aircraft.