

Released on receipt
but intended for use
September 17, 1929.

A Science Service Feature

? WHY THE WEATHER ?

Mailed September 10, 1929.

By Charles Fitzhugh Talman,
Authority on Meteorology.

LIGHTNING AND THE AIRPLANE

When an airplane is wrecked in a thunderstorm, as the "City of San Francisco" was the other day in New Mexico, it is usually difficult or impossible, after the accident, to tell whether the destructive agency was lightning or the notoriously turbulent winds, with their violent vertical currents, that prevail in the heart of the thunderstorm and are all the more dangerous because at the place where they are encountered "visibility" is likely to be negligible. These winds probably constitute a much greater danger than lightning, and they are certainly a sufficient reason why a pilot should give thunderstorms a wide berth if possible.

A British authority, C.J.P. Cave, says: "It is possible that the actual danger from lightning to an aeroplane flying through a thunderstorm may be no more than incurred by a pedestrian walking across an open common during a storm. A pilot who was flying above a thunderstorm reported that long sparks were given off by this machine at intervals."

This statement does not take account of the fact that lightning discharges are more frequent at flying levels than on the ground, but it is true that the number of cases in which planes have unquestionably been struck is exceedingly small. At Paxton, Ill., in August, 1918, an aviator flew into a thunderstorm and was found dead with lightning burns on his body. Turner, in his "Romance of Aeronautics", mentions a flyer named Ehrmann who had his machine set on fire by lightning but escaped unhurt. A passenger plane flying between London and Paris on April 16, 1926, was struck. A large patch of fabric on the lower wing was burnt, the compass was put out of action, and some other minor damage was done, but nobody was injured.

(All rights reserved by Science Service, Inc.)

SCIENCE SERVICE
21st and B Sts.
Washington, D.C.