

A Science Service Pamphlet

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? WHY THE WEATHER ? Mailed January 23, 1931

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DODGING THUNDERSTORMS

Thunderstorms are moderately dangerous to aircraft on account of their accompaniment of lightning. That this danger is not great is indicated by the extreme rarity of cases in which aircraft have been struck by lightning with damaging effects. On the other hand, such storms are very dangerous on account of the violent turmoil of their winds, including vertical blasts of great intensity. Hence the aviator should endeavor to give the thunderstorm a wide berth -- but not, except as a last resort, by trying to climb over it.

"The majority of present day airplanes," says Lieut. C. J. Maguire in a recent book on aeronautical meteorology, "do not have a 'ceiling' sufficiently high for positive assurance that the plane would not be caught in the tops of the clouds. Furthermore, in the time spent in climbing to 'ceiling' a plane would cover many miles in level flight. Many thunderclouds have been observed to extend to heights well above 30,000 feet.

"The great majority of thunderstorms can be skirted without causing very great deviations from the route. Even with a line-squall or a front of thunderstorms extending some several miles perpendicular to their direction of travel, a short detour will usually disclose gaps through which an airplane can be flown with safety and comfort."

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