

Released upon receipt
but intended for use,
March 24, 1930.

A Science Service Feature

? WHY THE WEATHER ? Mailed March 17, 1930.

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GROUND FOG AND THE AVIATOR

Ground fog--a shallow layer of fog in contact with the ground--was a more serious handicap of aviation a few years ago than it is today. W.L. Smith, of the National Air Transport, tells us that the pilots of that organization are on the alert for ground fog at the terminal station whenever the radio weather reports from there show that the dew point of the air is within 5 degrees of the current temperature.

"Ground fogs," he states, "are more prevalent during the early morning hours and disappear as the sun climbs above the horizon. By providing our planes with fuel sufficient for at least five hours of flying, and by the use of the radio-beacon and weather broadcasting, it is often possible for the planes to hover over their destination, flying in large circles awaiting the dissipation of the ground fog and landing as soon as the fog lifts sufficiently to permit this.

"Safe landings at large airports may be made at night through fog that is not more than 500 feet thick by the aid of the boundary light and red fuses strung across the field. Such landings are possible at night when they are not possible in the daytime, because the lights will show vertically upward through the fog. In order to make such a landing the pilot needs to have the very latest barometer reading, so that he may correct his altimeter accordingly, and this can be furnished by radio. The location of the field itself is determined by the radio-beacon located at one corner of it."

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