

A Science Service Feature

Released upon receipt
but intended for use
May 16, 1934

? WHY THE WEATHER ?

Mailed May 9, 1934

CLOUDS FORMED BY AIRPLANES

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During the World War much curiosity was aroused on several occasions by the appearance of long, slender streaks of cloud in the wakes of airplanes, at that time so numerous in the sky over the battle fronts. A captain in the American Expeditionary Force wrote of one of these cases:

"Our attention was first drawn to the sky by the sudden appearance of several strange and startling clouds -- long, graceful, looping ribbons of white. These were tapering to a point at one end, and at the other, where they dissolved into nothingness, sixty degrees across the sky, were about as broad as the width of a finger held arm's distance from the eye. On close observation we noticed some distance ahead of each cloud point the tiny speck of a chase plane. Apparently the churning of the air was all that was needed to upset the delicately balanced meteorological conditions and precipitate this strange cloud formation."

In more recent years a number of photographs of such clouds have been published in scientific journals and elsewhere. Their formation is not due, as above suggested, to the mere stirring of the air, but to the effect of the engine in supplying moisture to the air. The complete burning of gasoline produces two substances; carbon dioxide and water vapor. Roughly, for each gallon of gasoline burned there is produced enough water vapor to make a gallon of liquid water when condensed, and this amount, divided among the tiny droplets of a cloud, might easily make a visible streak at least a mile long. Whether such a cloud forms in the wake of the plane depends upon the state of the air, which must be very cold and also close to the point of saturation. Thus the appearance of a cloud is only an occasional result of the passage of an airplane across the sky.

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