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? WHY THE WEATHER ?

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FLYING WEATHERMEN

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Airplane flights for the purpose of securing weather data for the immediate use of forecasters are made nowadays on a rapidly growing scale. In the United States these "weather hops" are made daily (weather permitting) at many places; part of them by Army and Navy fliers, and part by commercial fliers under contract with the Weather Bureau. An effort is made to reach a height of 17,000 feet, and in the case of a commercial pilot the full contract price is not paid unless that height is reached.

The rate of climb during the airplane's ascent must not exceed 1,500 feet for any five-minute period. The airplane must level off during the ascent for at least one minute at approximately 1,500 feet above the ground and at each approximate 3,000-foot interval thereafter; also at the maximum altitude reached in each flight. After reaching the maximum altitude, the airplane is brought to the ground as rapidly as practicable, the descent portion of the record not being used. The entire flight is made as nearly as practicable directly over the airport from which the take-off is regularly made. At the same time that an automatic record is being made of the temperature, pressure, and humidity, the pilot is taking notes of the types of clouds observed and their elevations, of fog, haze and smoke layers, of the various kinds of precipitation encountered, the formation of ice on the plane, of excessive turbulence, etc. After the completion of the flight he must promptly submit a written statement of the various phenomena observed. The observer at the local weather station hastily interprets the entire record made, prepares a message in code, and transmits it to the several forecast centers in time to be used along with the numerous surface observations that are coming in at the same time.

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