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but intended for use
December 9, 1929

A Science Service Feature

? WHY THE WEATHER ?

Mailed December 2, 1929

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AERONAUTICAL METEOROLOGY

Though aeronautical meteorology is merely an application of weather science to the special needs of aerial navigation, it is a subject of broad scope. Prof. C. G. Rossby, one of the leading exponents of this new department of human knowledge, has recently written of it as follows:

"Aeronautics is all the time utilizing practically every phase of meteorology. Calculation of aircraft performance depends upon knowledge of the composition, density and temperature of the atmosphere at various levels. In the construction of airships detailed information concerning the structure of the wind is desirable. The selection of air routes and flying schedules is largely based on climatic statistics. The selection of airports is likewise affected by climatological considerations; especially as to variations of fog frequency from one site to another.

"The organization of a flying weather service and the proper distribution of stations require good understanding of the relation between topography and weather. Finally, intelligent flying weather advices and forecasts can be issued only by a man familiar with modern synoptic meteorology, and particularly with those phenomena that most strongly affect flying; viz, fogs or low clouds, ice-producing subcooled strata, and thunderstorms. Thus the aeronautical meteorologist must be well versed in every theoretical and descriptive phase of his science if he is to render complete service."

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