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? WHY THE WEATHER ?

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WINDS AND THE AIR MAIL

Only occasionally does the weather come to our attention in connection with the air mail: for instance, when some extreme condition such as a snow-squall or thunderstorm produces a mishap. Nevertheless, the winds experienced every day at all parts of each flight constitute an unavoidable factor in the maintenance of air mail schedules. Two years' records have now been studied and the results agree very well with deductions from kite and balloon wind observations.

The flying level is usually between 1,000 and 3,000 feet; though "in cold weather and against head winds, also, when there are low clouds or fog, pilots fly as low as possible, anywhere between 100 and 1500 feet." The records show the average speed over all sections of the coast to coast route was 86 miles per hour on the westward trip and 100 on the eastward. Thus the normal speed of the planes was 93 miles per hour and the helping or hindering wind factor averaged 7 miles per hour from the west. Winds with a west component occur about 70 per cent. of the time, while winds with an east component only 30 per cent. West winds are likely to be stronger as well as more frequent than east winds. In making up schedules which can be followed in 95 per cent. of the days, allowance is made for west component winds of 36 miles per hour, and east component winds of half that velocity. With head winds of this speed, flights are made but are usually delayed. Only about 5 per cent. of the time is it necessary to give up flights on account of heavy winds, storminess, or poor visibility.

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