

Released on receipt
but intended for use
January 16, 1930

A Science Service Feature

? WHY THE WEATHER ?

Mailed January 9, 1930

By Charles Fitzhugh Talman,
Authority on Meteorology

A RADIO PILOT-BALLOON

A radio pilot-balloon recently developed by the Meteorological Section of the U. S. Signal Corps permits the speed and direction of the upper winds to be determined when, on account of darkness, clouds or fog, it is impossible to follow the movements of a balloon visually by means of a theodolite. A miniature radio transmitter, arranged for sending automatic signals and weighing less than a pound, is sent aloft attached to a cluster of three hydrogen-filled balloons. The balloons are inflated until they have a definite ascensional speed of 200 yards a minute. As this speed is nearly constant, the height of the apparatus at any moment during a flight is known from the length of time elapsed since it was released. At two or three stations on the ground the direction from which the signals come is determined once every minute by means of direction-finding apparatus such as is used with the radio-compass. The directions are reported by telephone to a central point, where the movements of the balloons and of the air currents in which they are drifting are worked out and plotted.

(All rights reserved by Science Service, Inc.)

SCIENCE SERVICE,
21st and B Sts.,
Washington, D.C.