

A Science Service Feature

Released upon receipt
but intended for use
Dec. 11, 1934

? WHY THE WEATHER ? Mailed Dec. 4, 1934

RADIO AND RAINFALL

By Charles Fitzhugh Talman
Authority on Meteorology

The United States Weather Bureau is frequently asked whether radio broadcasting has any effect on rainfall. Here is a typical reply:

"Nature's method of making rain is first to get an abundance of water vapor into the atmosphere by evaporation from water surfaces, ice surfaces, growing vegetation and damp soil, and then to squeeze it out again, as it were, by decrease of temperature. This decrease of temperature is accomplished mainly by expansion of the humid air incident to vertical convection.

"Now, evaporation is a process that consumes a very large amount of heat, and radio does not produce a measurable amount of heat. Furthermore, we know from observation that evaporation is neither hastened nor decreased by radio.

"Neither does radio cool the air, nor in any way cause convection. In short, from theory and from observation we know definitely that radio does not affect any of the steps, or processes, by which water vapor is gotten either into the atmosphere or out of it. It neither increases rainfall nor decreases it."

(All rights reserved by Science Service, Inc.)

SCIENCE SERVICE
21st and Constitution Ave.
Washington, D.C.