

is a safe procedure for stacks whose exposed height does not exceed ten times the diameter. 4. The local values of the pressure may require consideration in the design of thin-walled stacks of large diameter.—*H. L. Dryden and G. C. Hill*, Bureau of Standards, Washington, D. C. *Abstr. Bulletin of the American Physical Society*, April 10, 1930, 5:7-8.

WEATHER MAPS BY WIRE

Kansas City soon is to become one of four points in the United States from which weather maps, designed primarily for air transport usage, will be distributed.

The area to be included in the weather map service from Kansas City will embrace that part of the United States between Eastern Utah and Chicago. Similar weather map stations will be located at Washington, Cleveland and either Oakland or Los Angeles.

For the Kansas City service, weather information will be collected by various methods of communication at Dallas, Tex., and at Omaha, Neb. This information will be sent to those two cities from numerous smaller communities where weather observation stations are maintained. From Dallas and Omaha the information will be sent here by the teletype system and, with data collected at Kansas City, will be incorporated in the weather map to be transmitted daily from this point.

The system to be used in this transmission utilizes what is known as a page printer, by which blank maps automatically are filled in elsewhere as the map is drawn here. The system is a sort of remote control device by which characters set down here will be reproduced instantly in other cities equipped for the purpose.

The page printers and teletypes are to be installed and operated by the department of commerce. A small room for this equipment adjoins the Weather Bureau offices in the new building, and it is necessary only for Weather Bureau employees to hand written information to the system operators in order to have it transmitted instantly.—*Kansas City Star*.

TEMPERATURES DURING HOT WINDS IN KANSAS

The report of 120° F. having been reached during a hot blast of air in a general period of hot winds, Sept. 5, 1931 (see December BULLETIN, P. 202), has been considered very doubtful by the Kansas Section Director of the Weather Bureau. Neighboring stations 25 to 65 miles in different directions show temperatures of 103°, 103°, and 108° on that day. Though the maximum thermometer in use at Ashland was checked and found to be correct, there was, of course, no opportunity to check the particular reading.

While it is reasonable to question reports which differ so greatly from adjacent ones, as this one did for Kansas, we cannot say positively that such a temperature would be impossible. Sharply localized occurrences of excessively hot currents have been noted. In fact some blasts have been reported as only about 100 feet in width,¹ and have been ascribed, with good reason, to local descents of the general hot wind. Thus, the excessive heat would be due not only to general heating of the air over the hot countryside, but also to the compressional heating of the descent, both general as the wind moves down the slope of the plains and local as it descends here and there in its turbulent motion.²—*C. F. Brooks*.

¹ Ward, Robert DeC., *Climates of the United States*, Boston, 1925, p. 407.

² *Ibid*, pp. 408-9.