

Notes and Comment

Stormy Weather In The Ionosphere

IONOSPHERIC storms have already been described in detail in a previous article.¹ Briefly, it will be recalled that we are living, not under an open sky as it seems, but under an invisible many-layered ceiling of electricity. This ceiling is called the ionosphere. The principal layers of this ceiling, the ones that noticeably affect radio communication, are four in number, named D, E, F1 and F2 respectively, distributed in that order in ascending altitudes from 60 to 300 kilometers above the ground. Now and then, these layers experience violent changes. When this happens, we have an ionospheric storm, often causing radio fade-outs, garbled broadcasts or freak receptions.

One such storm took place on 28 June 1957. That is to say, the storm was detected on that day at the Baguio ionospheric station of the Manila Observatory and at the Muntinglupa magnetic station of the Bureau of Coast and Geodetic Survey. It seems that the rest of the world did not notice it until after a day or two, according to early dispatches of the Associated Press and the International News Service.²

Abnormal conditions began to appear just before 4:00 A.M. (Philippine time, corresponding to 8:00 P.M. of the previous day, Greenwich time) with a magnetic disturbance detected at Muntinglupa. (See Fig. 1.) At about 8:00 A.M., a probing radio beam

¹ J. J. Hennessey S.J. PHILIPPINE STUDIES IV (1956) 29-317 and sources cited therein.

² *Manila Daily Bulletin* 3 July 1957 p. 24 col. 2 and *Manila Times* 2 July 1957 p. 15 col. 2.