

7/11/63

"Atmospheres at High Frequencies" by K. G. Janzky.
Proc IRE, Dec. 1932, Vol 20.

Page 1925: The third group is composed of a very steady his type static, the origin of which is not yet known.

Page 1930: During the later part of December ⁽¹⁹³¹⁾ and the first part of January ⁽¹⁹³²⁾ the direction of arrival of this static coincided, for most of the daylight hours, with the direction of the sun from the receiver. -- now (March 1st) it precedes in time the direction of the sun by as much as an hour. See curves figure 13.

Page 1931: Since this paper was written the curve has shifted much further left. Now (May 25th) it crosses south at 4:30 am. (Footnote)

Pages 1931 & 2: The fact that the direction of arrival changes almost 360 degrees during twentyfour hours; and that the shift in the position of the curve observed during the three months over which data has been taken corresponds to the change in latitude of the sun; affords definite indication that the source of this static is somehow associated with the position of the sun. It may be that the static comes directly from the sun or, more likely, it may come from the subsolar point on the earth.

Wide wavelength range no disk decided upon, Built 1937
Dia 31.5 ft, 20 ft focal length, accurate $\pm 1/4$ "

First tests at 3300 mc. Magnatron signal generator, Crystal detector
1937 and 3 stage audio amplifier. Tuned cavity with horn.
Only thermal hiss heard. Magnatron very noisy detector. Lot
of shot noise. Special diode very insensitive plus evaporator noise.

Second tests 910 mc. Push pull regenerative receiver using 955 tubes.
1938. Some audio amplifier. Cavity with iris. Still no results.

Third tests 160 mc. Five stage TRF amplifier. Electrically
1939 stable but mechanically & thermally unstable. Electrical
shock changes in velocity potential. Success on galaxy but
useless during daylight. Band 160 KC = 0.1%, Too sharp.

Fourth Tests 160 mc. Five stage TRF amplifier. 8 MC band, New
1942 detector diodes. Very stable all around. Not tried on sun
until September 1943, Pen went off scale,

Fifth Tests 480 mc. Four stage TRF amplifier. 20 MC band, 120 DB. ^{gain}
1945 Electron multiplier tubes had very high gain but lot
of shot noise and very short life. Sun visible at times
when enhanced background but no galaxy.

Sixth Tests 480 mc. Six stage TRF amplifier 12 MC band,
1946 Light house tubes. Galaxy now visible weakly and sun
always present. Frequent bursts detected with very
large storms in November. General background rising
and varying slowly by 1947.