

# SOME IMPROVEMENTS ON THE ATMOSPHERICS WAVE FORM RECORDER.

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W-60 type atmospheric wave form recorder, reported in a previous paper, has been employed for measuring the wave form of atmospheric, but yet this apparatus had several defects shown as follows :

- (1) The large output voltage of the main amplifier was required, because of the high voltage acceleration to cover low photographic sensitivity
- (2) The frequency response was so narrow that the reproduction of the wave form was incomplete.
- (3) The records were disturbed by the noises of low frequencies, especially in the ranges of 300 c/s and 3-4 kc/s.
- (4) The retardation network was not used.
- (5) The operation of the recording camera was imperfect.
- (6) The performances of the accessory circuits were inaccurate.

In order to eliminate these troubles, W-60 type atmospheric wave form recorder was improved to a newly designed apparatus, in which a cathode ray tube of electrostatic deflection type and improved accessories were used.

Test observations showed favorable results. Details of this improved system will be found in following circuit diagrams.

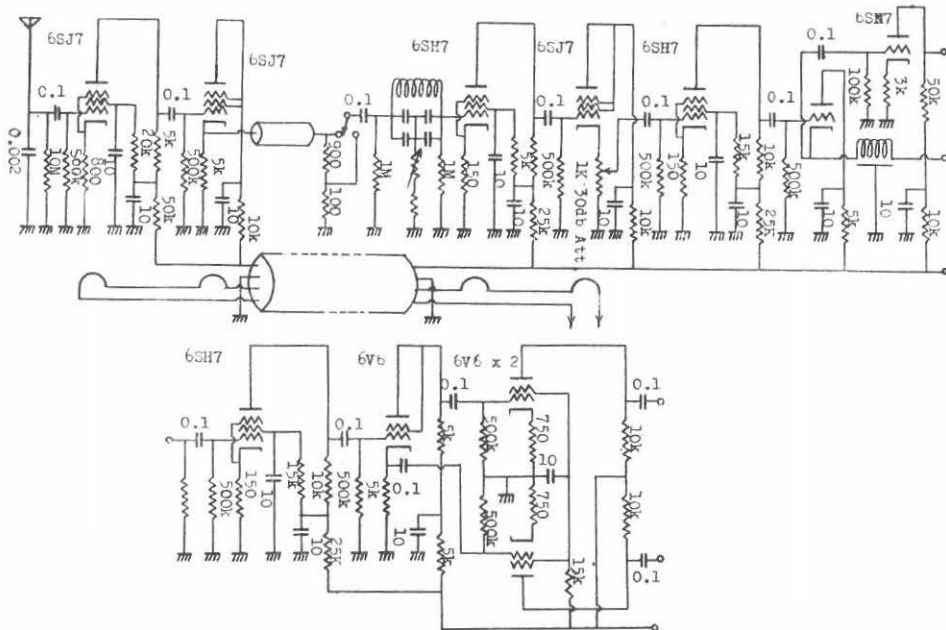


Figure 1. Circuit diagram of the amplifier of the atmospheric wave form recorder.

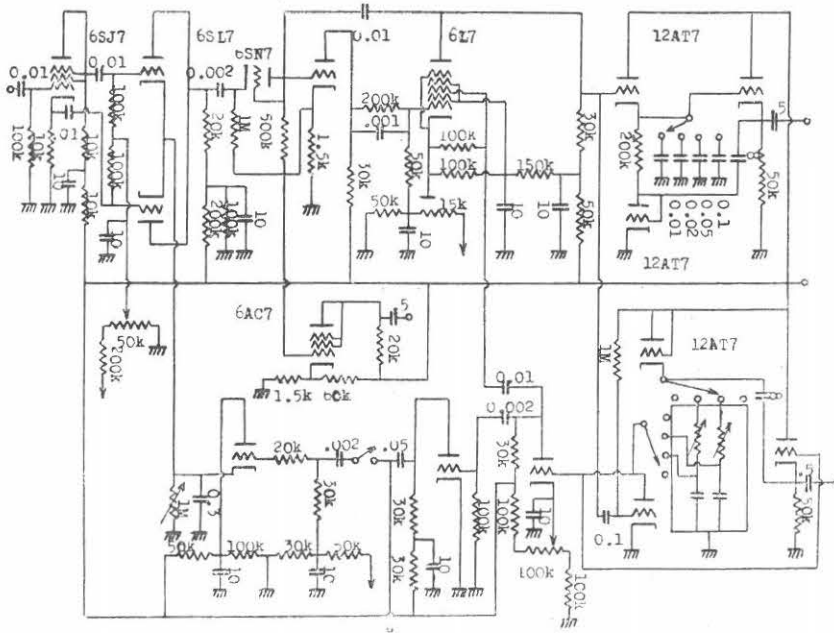


Figure 2. Circuit diagram of the sweeper and brilliance modulator of the atmospheric wave form recorder.