

Memo.

Radio Interference No.17. Electrical Interference at Burnham Radio.

In accordance with instructions investigations were carried out between the 9th and 11th instant in connection with the interference with the reception of South Wales trawler traffic at Burnham Radio (D.H.Memo. No. 385 relates).

Until the morning of the 11th (Sunday) the trawlers were heard working at intervals and the signal to noise ratio was estimated to be sufficient to enable commercial service to be given.

On the 11th while listening tests were in progress near the power line in the vicinity of the station serious interference was heard and traced to the Davanet (mercury Vapor) charger for the station land line battery. The noise could be heard on the S.W. D.F. receiver at approximately 10 yds from the junction of the overhead and underground power lines and could be detected when near to the main overhead power route at a distance of half a mile from the station.

Methods of elimination were tried and chokes and condensers in the common A.C. feeders to the working and spare rectifiers were found to effect a complete cure.

The arrangement used consisted of a choke in series with each lead from the local A.C. switch to the change over switches, with two 2 mf condensers in series across the rectifier side, the centre point of them being connected to earth. A standard condenser unit 1B and traffic signal type chokes, as kept in stock at Dollis Hill, could therefore be used since the current passing is about .5 amp at 230 volts. It is thought that a convenient position for this equipment could be found behind the A.C. switchboard.

G.E.C.
Radio.
15/6/33.

POST
OFFICE

SS 280.

