

**INVESTIGATION PROCEDURE**

**Tests to prove the efficiency of complainant's receiving installation**

**1. General.** During the initial visit to a complainant the investigation officer should note full details of the receiving installation, i.e. type of receiver and aerial system used, etc. The complainant should be asked to demonstrate the interference, and the nature and degree of interference with reception of local B.B.C. stations should be carefully noted. Experience will enable investigation officers to obtain valuable information from these observations. Information as to duration and times of occurrence of the interference should also be obtained from the complainant. The general recommendations in this Instruction are also applicable to television installations. Details of the most common types of interference to television reception are given in B 0007.

**2.** In addition to the foregoing observations, tests will usually be necessary to decide whether the complaint is due to interference, or to the effects of a fault or faults, in the receiving installation. The tests outlined in the following paragraphs will decide this point and will give further data as to the nature of the interference, if present.

**3. Comparison of reception on the official portable receiver and the complainant's set.** To enable a satisfactory comparison to be made, the two receivers should be tuned to the same station, and the signal/noise ratio (not the actual volume of noise) should be observed. While listening on the official receiver, the complainant's receiver should be switched off, as otherwise a fault in the latter may give rise to noise in the former.

**4. Tests at complainant's premises** to determine whether the complaint is due to a faulty receiving installation or to interference from other sources, are shown in Table 1

TABLE 1

TEST	RESULT	CONCLUSION
Listen to official receiver using internal frame aerial	Interference heard	Radio interference obviously existing
	Interference not heard	Directly-radiated interference picked up in the complainant's receiving aerial or earth system or as a result of a faulty receiving installation
Listen to complainant's receiver. Disconnect aerial and earth	Interference ceases	Faults in aerial/earth system or interference picked up by aerial, lead-in or earth lead
	Interference continues	Receiver faults, or interference picked up by receiver wiring or conducted into the receiver via power unit
Listen to official receiver with complainant's aerial and earth connected to it	Interference heard	Faults in aerial/earth system, or interference picked up by aerial, lead-in, or earth lead
	Interference not heard	Receiver faults

**5. Faulty receiving installation.** If the tests indicate that the complaint is due to a faulty receiving installation, the investigation officer should rectify minor faults, (see A 2001) but if the fault is more serious and cannot be easily remedied he should, when practicable, demonstrate to the complainant that the receiver or the aerial-earth system is faulty and suggest that the matter be referred to a radio service engineer, or the manufacturer of the receiver.

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**6. Interference from sources other than the receiving installation.** If interference is present, further tests should be made. These are detailed in Table 2.

TABLE 2

TEST	RESULT	CONCLUSION
Listen to interference on official receiver then switch off electric lighting and power supply to the complainant's premises	Interference ceases	Mains-propagated interference; radiation from complainant's electric wiring or faults in electric wiring
	Interference reduced	Mains-propagated interference partly radiated from electric wiring in neighbouring premises or partly directly-radiated interference
	Interference unaffected	Directly-radiated interference
Switch on E.L. and P. supply and place official receiver near electric wiring	Interference increased	Mains-propagated interference
Take official receiver outside building, clear of electric wiring, street mains, etc.	Interference still present	Directly-radiated interference

**7. Susceptibility of receiving installation to interference.** If, after considering all the facts, the investigation officer is of the opinion that the receiving installation is unnecessarily susceptible to electrical interference, he should explain as clearly as possible why this is so, and suggest practical alterations to improve reception (see F 0050).

References:- A 2001, B 0007, F 0050  
(WM 1/3)

*Instruction cancelled:-* General, C 0303

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