AE

STANDARD METHOD OF PRACTICAL INSTRUCTIONS ON RECEIVING MODELS AND TRANSMITTING SETS.

1. Tuners and associated amplifiers are dealt with together.

2. Stripping models, if available, are demonstrated during technical lectures where care and maintenance routine is dealt with.

3. Instruments in D/F offices are dealt with as for receiving models above and in addition each member of class takes bearings and finds "sense".

RECEIVING MODELS.

1. Explain and trace power supplies from source to model.

2. Explain working of model by means of diagrammatic sketches such as those in B.R. 222.

3. Point out on model the various controls shown on sketch so that ratings understand what is being done inside the model when a dial or switch is moved.

4. Explain methods of care and maintenance if this has not been done on stripping models.

5. Switch on and demonstrate normal working of model.

6. Each member of class switches on and operates in normal manner.

7. Demonstrate method of tuning and adjusting to a required frequency.

8. Members of class tune and adjust if time permits.

TRANSMITTING SETS.

1. Explain and trace power supplies from source to transmitter first on diagrammatic sketch as in B.R. 222 and then in actual practice.

2. Explain working of transmitter on above diagrammatic sketch.

3. Locate in transmitter the various components shown on sketch.

4. Trace on sketch all auxiliary circuits and then locate, explain and demonstrate these on actual transmitter.

5. Explain method of care and maintenance.

6. Switch on and demonstrate normal working of transmitter.

7. Each member of class switches on.

8. Demonstrate method of tuning and adjusting transmitter to a required frequency.

9. Members of class tune and adjust if time permits.

TYPICAL QUESTIONS.

These are not applicable to ALL models or to ALL transmitters.

TUNERS.

1. What is the frequency range ?
2. Where is the model fitted ?
3. Of what does the primary circuit consist ?
4. Of what does the secondary circuit consist ?
5. Comment upon the method of coupling the above circuits.
6. How can it be ascertained whether the valve equivalent condenser is of the right value ?
7. Is any special form of screening employed ?
8. Sketch the circuits diagrammatically both in "Stand-by" and "Tune" positions.
9. Why are "Stand-by" and "Tune" positions fitted ?
10. Describe the circuits of a tuner used for D/F purposes.

AMPLIFIERS AND TUNER AMPLIFIERS.

1. How many valves are there and what duties do they perform ? What type of detection is employed and how is it arranged for ?
2. Are there any special precautions taken to prevent self-oscillation ?
3. What are the power supplies to the model ?
4. Describe the form of reaction that is employed.
5. What types of intervalve coupling are employed ?
6. What is the frequency range and how is this range covered by the tuning adjustments ?
7. Sketch diagrammatically the circuit.
8. How is the aerial circuit coupled to the first valve ?
9. What arrangements are made for remote reception ?
10. Explain the action of the amplifier when receiving C.W. or I.C.W.

TRANSMITTERS.

1. Describe the transmitter in standard form.
2. Describe the power supplies from the source to the anode and filaments of the transmitting valves.
3. What are the functions of the magnetic key ?
4. What is the frequency range of the transmitter and where is the transmitter fitted ?
5. Describe the aerial circuit.
6. Describe and sketch the rectifier unit.
7. Describe all D.C. and auxiliary circuits.
8. Describe the method of tuning the transmitter to a particular frequency.
9. Are any special arrangements made for frequency stabilisation ? If so, describe them in detail.
10. What is the H.T. voltage on the anode of the T valves.

TYPICAL QUESTIONS

TRANSMITTERS (CONTD).

11. Sketch the path of the D.C. and A.C. components of the valve current.

12. What are the functions of the rectifier switch and the anode key ?

13. What effect does the position of the anode tap have on the transmissions ?

14. Why are anode ammeters fitted ?

15. How is the negative grid bias on the transmitting valves obtained and what is its approximate value ?