

NOTES FOR REMOTE OPERATORS

In conjunction with the Weapons Research Establishment a major overhaul of certain components within the Master and Remote Aerodist units has taken place. This has not been an inexpensive operation, the cost of refurbishing amounted to many thousands of dollars. Bench tests indicate a marked increase in power output and an overall improvement in case of adjustment. We are hopeful that this trend will carry over into the field.

2. In previous years not enough care has been taken in the "on-site" care of remote units. Operators tend to treat them as "second class citizens" when compared to tellurometers. This should not be the case, it must be remembered that they are the backbone of the operation and are a very delicate electronic instrument. It is essential that they be handled with care and protected from dust, shocks and water. GENTLE HANDLING IS ESSENTIAL.

3. All remote units have been semi-dust proofed and operators should ensure that they remain that way. When in transit or not in use the units are to be placed inside a plastic bag in the special transit cases provided.

4. Associated components such as dishes, dipoles, barometers etc. are to be treated carefully and dipoles are not to be forced into position.

5. Notes on the Use of Remote "Double-Back" Unit :

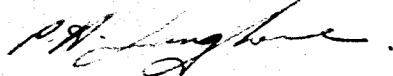
5.1 These units are very delicate instruments, and must be treated with reverence. Rough handling can cause changes of frequency and loss of power output from the remote unit, which in turn can mean the ultimate loss of a measurement.

5.2 Dust and dirt must at all times be prevented from collecting on and in the gold plated cavities, as the abrasive effect of dust will destroy the operation of the cavities in a very short time.

5.3 Changing of a Remote "Double-Back" Unit :

1. Switch Remote unit to OFF.
2. Open rear door flap.
3. Disconnect triode lead, (heavy co-ax lead with screw connector).
4. Partially open complete BACK.
5. Disconnect the three IF leads. (2 co-ax, and one small multi-pin connector).
6. Open BACK further, and disconnect the large power connector.
7. Carefully remove the new BACK from its dustproof box, lift old BACK from its hinges, and replace the new BACK.
8. Carefully place old BACK in dustproof box.
9. Connect the large power cable, then the 3 IF leads.
10. Close BACK, and connect the large co-ax triode lead, and close small lid.
11. Switch remote unit ON, and allow a minute or two to warm up.

12. Switch the 'switched meter' to the TRIODE position.
 13. Adjust (with screwdriver), the REFLECTOR TUNE for maximum TRIODE CURRENT reading.
 14. Now adjust the TRIODE FINE TUNE (screwdriver adjustment) (located at base of BACK), for maximum CRYSTAL CURRENT reading. This adjustment must be made with care.
 15. Any further adjustments must only be made as directed from the MASTER in the aircraft.
6. When any REMOTE unit is first switched on, whether it is a SINGLE (or DOUBLE back unit, its performance can be checked by simply adjusting the TRIODE FINE TUNE screwdriver adjustment to give maximum CRYSTAL CURRENT reading. Crystal current is in fact a measure of the power that the remote unit is producing).
7. Also when the line measurement is in progress, the AVC reading is a measure of the power that the MASTER is producing.
8. It follows then, that high readings in both CRYSTAL CURRENT and in AVC mean good measurement results, (i.e. measurement, without pain).



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15.7.74

Copies sent to all pilot staff.

15.7.74.



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