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**OVER-THE-HORIZON RADIO SYSTEMS**  
**ITTL 12A1 OVER-THE-HORIZON RADIO SYSTEM**  
**NUS 3298 RECEIVER**  
**IF ATTENUATOR**  
**TEST AND MAINTENANCE**

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This section contains the test and maintenance procedures for the IF attenuator of the NUS 3298 receiver.

The test and maintenance procedures described in this section require the system receivers to be operated in dual diversity with the receiver under test removed from service.

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**APPARATUS:**

- 1—J68337F FM Test Set
  - 1—J68340N Power Meter
  - 1—9A Attenuator, 5 dB
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**CHART 1**

**TEST PROCEDURE**

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The IF attenuators require no power and may be removed from the receiver for testing.

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<b>STEP</b>	<b>PROCEDURE</b>
1	Calibrate the power meter for IF measurement using the black scale as described in Section 104-411-300.

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**CHART 1(Cont)**


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**STEP****PROCEDURE**

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- 2 Arrange the test equipment and make initial control adjustments as shown in Fig. 1. Use option (X). Connect the ends of the two test cables using a H228-81C, G1 cord.
- 3 Set the controls of the 45A test set as indicated.

CONTROL	POSITION
POWER	ON
OSC	ON
OSC TUNE	70 MC

**Control Adjustment Table**

- 4 On the FM test set, adjust the OSC LEV control to obtain a power meter indication of 0 dBm.
- 5 Insert the IF attenuator in the test circuit as shown in Fig. 1, option (Z). Release all the controls on the attenuator under test.

**Requirement:** The power meter indication is a value no lower than  $-0.3$  dBm.

**Note:** Failure to meet this requirement is indication of attenuator switch trouble. The switches should be cleaned as described in Chart 2.

- 6 Operate each of the IF attenuator controls individually while observing the power meter.

**Requirement:** The numerical value (in dBm) indicated on the power meter should agree with the designated value of each attenuator control operated within 0.3 dB.

**Note:** If this requirement is not met, or, if any instability in the power meter indications is observed, the attenuator switches should be cleaned as described in Chart 2.

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**CHART 2****REPAIR AND MAINTENANCE**


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The IF attenuators should be disassembled for maintenance, only if the requirements in Chart 1 are not met. If any work other than cleaning of switches is necessary, the attenuators should be returned

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**CHART 2(Cont)**


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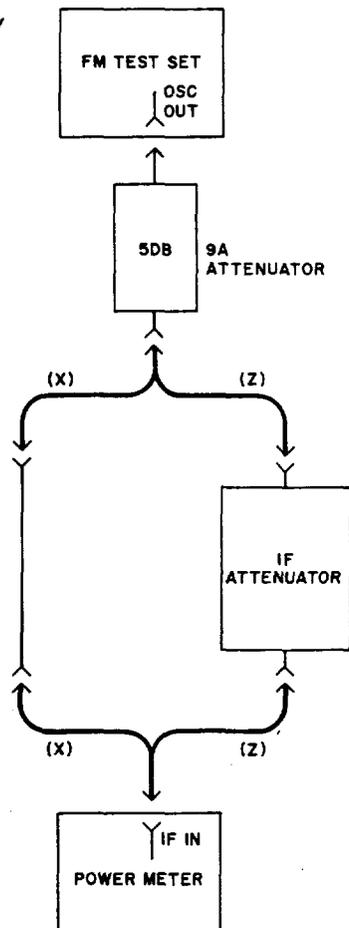
to the manufacturer, The Daven Company, Repair Department, Manchester, New Hampshire, for reconditioning.

Cleaning methods are described below.

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**STEP****PROCEDURE**

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|---|--|
| 1 | Remove the attenuator cover plate.   |
| 2 | Using a clean camel-hair brush and medical alcohol, clean each switch contact by applying the alcohol liberally to the contacts while operating the attenuator controls. |
| 3 | Permit the alcohol to evaporate and replace the attenuator cover plate.  |
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**Fig. 1—IF Attenuator—Test Setup Diagram**