

**OPERATION AND MAINTENANCE  
1×N FREQUENCY DIVERSITY  
DR 6/11-135A AND 135EC  
TWT AMPLIFIER  
RADIO TRANSMITTER TROUBLE ISOLATION**

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Published by  
The AT&T Document Development Organization

## 1. GENERAL

Trouble-clearing for any radio transmitter alarm begins with the trouble isolation flowchart. All radio bay transmitter alarms, except the DC power unit failure alarms, are indicated on the centralized ALARM plug-in unit, or the optional ALARM AND METER unit, located in the transmitter shelf. A DC power unit failure will inevitably activate one or more of the centralized transmitter alarms. When any of the local transmitter alarm indicators are activated, the alarm plug-in will remotely report a single radio transmitter failure alarm status signal. This "summing" status signal can be used by the remote alarm center and/or other intermediate centralized alarm-reporting circuitry to monitor the radio transmitter performance.

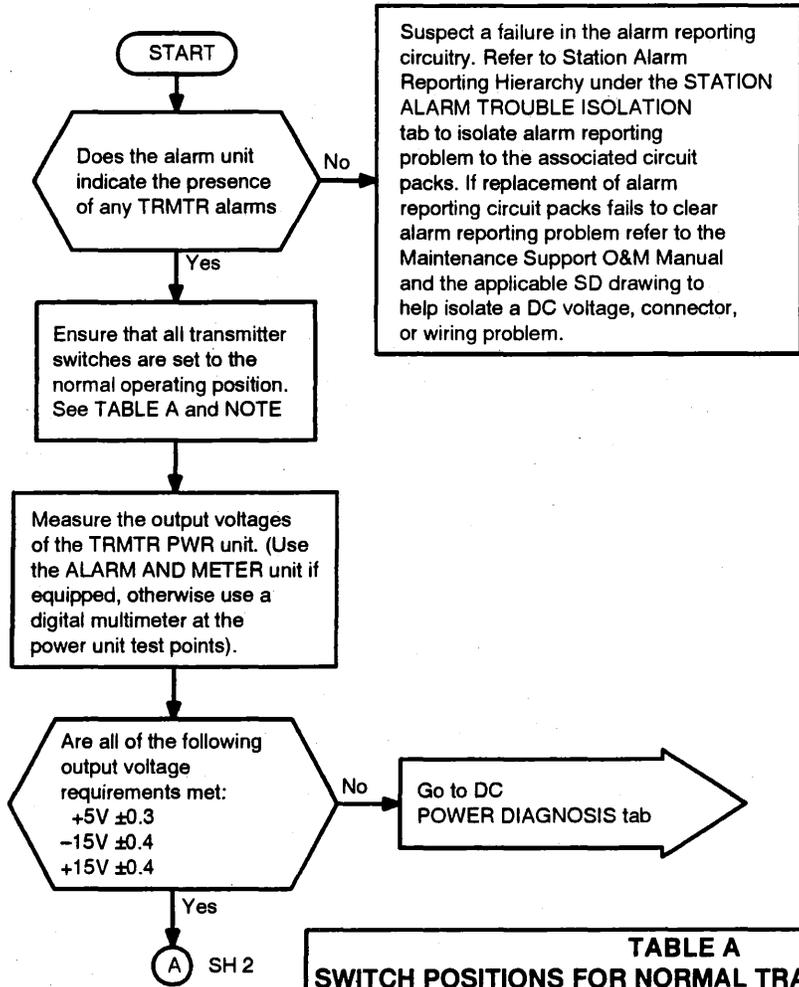
There are two transmitter alarms indicated on the radio bay alarm plug-in unit, a TRMTR GEN OVEN (up-converter microwave generator oven) alarm and a TRMTR RF PWR (transmitter RF power output) alarm. Unless there is trouble in the alarm-reporting system, one or both of these alarms should be lighted whenever a radio transmitter failure alarm has been sent to the alarm center. Information relative to the significance of each transmitter alarm and the details of how each alarm is activated are covered in the preface to the flowchart for the alarm.

### 1.1 UPDATE INFORMATION

This practice is reissued to revise the Radio Transmitter Trouble Isolation procedure.

## 2. TROUBLE ISOLATION FLOWCHART

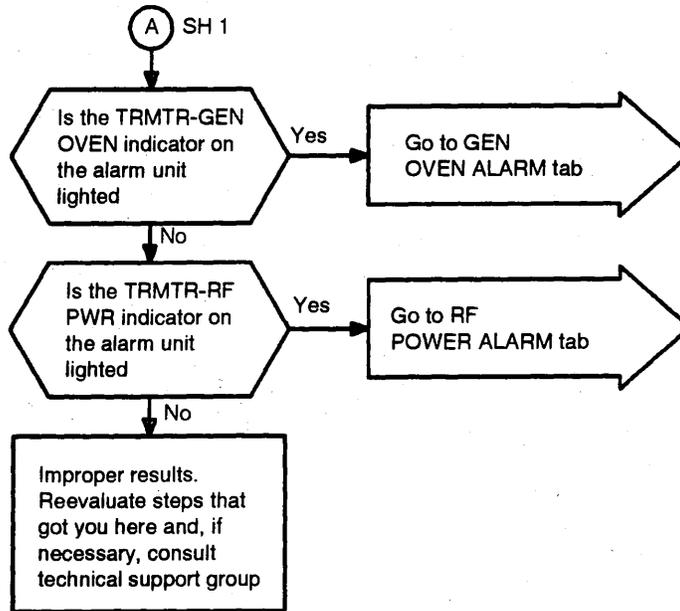
Flowchart 1 is the starting point for isolating and clearing *alarmed* conditions in a radio transmitter. The detailed alarm-clearing logic diagrams are not specifically designed to clear multiple failures or take into account faulty spare units. However, if the alarm indicators are functioning properly and the logic diagram instructions and recommendations are followed, any multiple failure should ultimately be cleared.



UNIT	SWITCH DESIGNATION	NORMAL POSITION
TRMTR PWR	TRMT ON/STBY	TRMTR ON
ALC NETWORK	ALC ON/OFF	ALC ON
TWT CONTROL	ON/OFF	ON
	TRANS/STBY	TRANS

NOTE: If necessary, set to normal position(s). The transmitter alarm(s) should extinguish after all individual unit alarms have cleared. If the transmitter alarm(s) clears, but there is still an alarm at the station, return to STATION ALARM TROUBLE ISOLATION tab. Otherwise, proceed to REPAIR VERIFICATION tab

**Flowchart 1-Radio Transmitter Trouble Isolation (Sheet 1 of 2)**



**Flowchart 1—Radio Transmitter Trouble Isolation (Sheet 2 of 2)**

