TYPE N2 CARRIER TELEPHONE SYSTEM
LINE TERMINATING UNIT
CHECK OF LINE CURRENT

When a local source of power is not available at a repeater point, dc power can be supplied to a repeater by means of simplex arrangements over the two cable pairs used for carrier transmission. In this manner, one electron tube repeater or up to three transistor repeaters in series may be powered. When unsoldered cable splices are used, a small amount of direct current may be applied in a similar manner to the cable pairs in sections not transmitting repeater power to seal the splices. The section fed sealing current may be beyond the repeaters receiving power from the N2 terminal.

Options are available, by means of screw-type connectors in the line terminating unit, for the different power conditions.

The purpose of this test is to measure the line current (repeater and/or sealing current) by measuring the voltage drop across a 10-ohm resistor located in the line terminating unit which is connected in series with the line current path.

APPARATUS:

KS-14510, List 1 or List 5 Volt-ohm-milliammeter, or equivalent (20,000 ohms per volt)

STEP	PROCEDURE
1	Measure, with the volt-ohmmeter, the voltage drop across the SX CUR jacks J5 and J6 in the line terminating unit. ***Requirement:*** The voltage limits (across R10) shall be as specified in Table A.

TABLE A

FEATURE	VOLTAGE LIMITS (ACROSS R10)		
	LINE-UP	MAINTENANCE LIMITS ON POWER SUPPLY	
		NORMAL	EMERGENCY
Electron Tube Repeater	1.65 to 1.75	1.60 to 1.80	1.55 to 1.90
Electron Tube Repeater Plus Sealing Current	1.85 to 1.95	1.78 to 2.02	1.73 to 2.12
Transistor Repeater — Average Cable Temperature	1.08 to 1.12	1.04 to 1.17	1.00 to 1.47
Transistor Repeater — Extreme Cable Temperature	1.05 to 1.15	1.00 to 1.44	0.90 to 1.55
Sealing Current Only	0.16 to 0.22	0.15 to 0.24	0.13 to 0.27

2	If the requirements of Table A are not met, refer to the appropriate section for adjustment procedures.