

TERMINATING MARKER CONNECTOR ALARM ROUTINE NO. 1 CROSSBAR OFFICES

1. GENERAL

1.01 This section describes the procedure to be followed in response to the terminating marker connector alarms. The alarms described are as follows:

- (A) Time Measure Alarm
- (B) False Release Ground Alarm

1.02 When any terminating marker connector fails to perform its functions when called upon by one of its senders, it is arranged to time out, operating the marker connector time alarm. When this occurs, the CT lamp (which is common to all marker connectors) is lighted at the terminating trouble indicator frame and the major audible alarm is sounded.

1.03 If a terminating marker is being held by the terminating marker connectors giving an alarm, the marker time alarm functions and the trouble indicator may be called upon to take a record of the equipment involved and the condition within the marker.

1.04 The operating of the terminating marker connector time alarm automatically takes the associated senders out of service. The condition causing the alarm may furthermore be of such a nature that it will similarly block any other call coming through the marker connector, before the trouble has been located and cleared. It is, therefore, essential that prompt attention be given such alarms in order that serious service reactions may be averted.

1.05 The time measure alarm does not lock in, therefore, the alarm as well as the trouble indications may be released upon timing out of the associated senders.

1.06 False ground on the "RL" or "TRL" lead causes a locked in alarm but does not remove the associated senders and marker connectors from service.

1.07 The lamp and keys associated with the alarms for the terminating marker connector are all located on the terminating trouble indicator frame.

2. APPARATUS

2.01 No. 275A (make-busy) plug.

3. METHOD

(A) Time Measure Alarm

3.01 If in response to the major alarm a lighted CT lamp on the trouble indi-

cator frame is found, operate the Bat. Key. This connects battery to all of the C (marker connector) and S (sender) lamps of the marker connector time alarm circuit and causes the C lamp of the marker connector involved to light steadily. If the sender is still attached the S (sender) lamp will also light steadily.

Note: The C and S lamps will light as long as the sender is connected to the terminating marker. Hence, only a steady lamp indicates a trouble condition.

3.02 Insert a 275A plug into the GB jack associated with the connector in trouble in order to insure that the circuits are held out of service until the trouble is cleared.

3.03 Observe the C and S lamps and from them determine in what general direction or in what particular piece of equipment trouble may be located; for example, (a) if only the C marker connector lamp is lighted, the alarm has probably been caused by the operation of one of the SS relays and by the failure of its associated S relay to operate; (b) the lighting of an S lamp in addition to the C lamp may be an indication that the marker connector had been seized by a sender, but either it has failed to connect itself to a marker or the marker to which it has connected has failed to complete its functions.

3.04 Observe the relays in the marker connector to more definitely locate the source of trouble.

3.05 If the S and C lamps are lighted but no marker time alarm operated, check the DS relays of the marker connector to be sure no marker has been seized. If not, check the CB relays to determine which is the first marker available to the marker connector and find out why that marker has not been connected. Should it be found that all markers are busy to the marker connector, determine the reason for this condition and release at once any which are being held busy in error.

3.06 If a marker is inoperative with respect to all marker connectors, make it busy by placing a No. 275A plug in the associated DB jack.

3.07 If a marker is inoperative with some marker connector but will function properly with others make it busy to the former by placing a 275A plug in the proper GB jack.

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3.08 If the trouble is located in the sender and is such that it cannot be cleared immediately, make the sender busy by placing a No. 275A plug in the sender make busy jack, and manually restore the sender to normal. Then remove the 275A plug from the GB jack associated with the connector and restore the BAT key to normal.

3.09 If the trouble is located in the marker connector circuit it may be necessary to keep the entire group of senders out of service until the trouble has been definitely cleared.

3.10 If a terminating marker is being held, the terminating marker time alarm will usually be found operated in addition to the marker connector time alarm. Under this condition the DT lamp in addition to the CT lamp will be lighted on the trouble indicator frame. When two such alarms are associated, proceed in accordance with the instructions for the marker time alarms.

(B) False Release Ground Alarm

3.11 When the GR lamp is lighted operate the BAT key and note which marker connector is in trouble as indicated by the C lamp.

3.12 Insert a 275A plug into the GB jack associated with the marker connector in trouble.

3.13 Operate the RLA key. This may restore the major alarm and extinguish the C and GR lamps.

3.14 If the C and GR lamps are not extinguished upon the operation of the RLA key it may be an indication that there is a solid ground on the "RL" or "TRL" leads.

3.15 If the GR lamp was extinguished by the operation of the RLA key inspect the wiring and contacts associated with "RL" and "TRL" leads for possible sources of intermittent crosses and grounds.

3.16 After the trouble is cleared it may be necessary to reoperate the RLA key to restore the major alarm and the C and GR lamps.

3.17 Remove the 275A plug from the GB jack so as to restore the terminating marker connector and senders to service and restore the BAT key to normal.

4. REPORTS

4.01 The required record of these alarms should be entered on the proper form.