FUSE ALARM ROUTINE
NO. 1 CROSSBAR OFFICES

1. GENERAL

1.01 This section outlines the procedures to be followed in handling fuse alarms in No. 1 Crossbar Offices.

1.02 This section is reissued to bring it in conformity with other material in the Plant Series. In this process marginal arrows have been omitted.

1.03 Fuse alarms are brought in when an individual circuit, filter, frame, battery distributing or discharge fuse is operated. In all cases, yellow exit pilot lamps are lighted on floors other than the floor on which the fuse is operated and, if the alarm switching keys on these other floors are operated, the yellow OF pilot lamps are also lighted.

1.04 When an individual circuit fuse mounted on the frame fuse panel or on the miscellaneous fuse panel is operated, the red FA or FP lamp is lighted, the red aisle pilot and main aisle pilot lamps are lighted and the associated major or minor alarm is sounded until the alarm is retired by removing the operated fuse.

1.05 When an individual circuit fuse mounted on the fuse panel in the rear of the switchboard position is operated, the green position fuse alarm lamp and the green common pilot lamp in the cable turning section are lighted, the red aisle pilot and main aisle pilot lamps nearest the floor alarm cabinet on the floor nearest the operating room are lighted and the associated minor alarm is sounded until the alarm is retired by removing the operated fuse. A white lamp is also lighted in the floor alarm cabinet.

1.06 When a filter fuse mounted on the cable turning section is operated, the green fuse alarm lamp mounted on the filter panel is lighted, the red aisle pilot and main aisle pilot lamps nearest the floor alarm cabinet on the floor nearest the cable turning section in trouble are lighted and the associated minor alarm is sounded until the alarm is retired by removing the operated fuse. A white lamp is also lighted in the floor alarm cabinet.

1.07 When a frame fuse or talking battery filter fuse mounted in a fuse mounting on the frame fuse panel or filter unit is operated, the red 20A, FC1 or FC2 lamp is lighted, the red aisle pilot and main aisle pilot lamps are lighted and the major audible alarm is sounded until the alarm is retired by removing the fuse head on which the operated fuse is mounted.

1.08 When the battery distributing fuse mounted on the end guard at the end of an aisle is operated, the alarm type fuse which parallels the N.E.C. (cartridge type) battery distributing fuse is also operated, the red aisle pilot and main aisle pilot lamps are lighted and the major audible alarm and power failure audible alarms are sounded until the alarm is retired by the removal of the operated fuse.

1.09 When a main equalizing center discharge fuse is operated, the white lamp at the power board lights, the power alarm audible signal is sounded and the yellow exit pilot lamps and yellow OF lamps on all floors are lighted.

1.10 An operated fuse in a marker, transverter or master timing circuit automatically takes the circuit out of service and holds it out until the AL and white guard lamps, which are lighted when the fuse is replaced, are extinguished by the operation and release of the AR key in the associated marker, transverter or master timing circuit frame.

2. APPARATUS

2.01 Supply of 35 type fuses of proper capacity

2.02 Supply of fuse heads with No. 67A fuses.

2.03 Supply of N.E.C. (cartridge type) fuses of proper type and capacity.

2.04 One No. 298A or No. 349A plug (for taking crossbar switch out of service).

2.05 Five No. 325C or No. 351C make busy plugs.

2.06 Blocking tools as required (508A)

3. METHOD

3.01 Fuses Other Than Main Equalizing Center Discharge Fuse

If the cause of the failure is not readily apparent proceed as follows:

(a) Individual Circuit Fuses

(1) District Link Secondary Hold Magnet Fuses: If the fuse associated with these hold magnets operates, take out of service the switches on which the hold magnets are mounted and then replace the operated fuse with one of the proper type and capacity. If the new fuse does not operate, restore the switches to service.

(2) All Other Individual Circuit Fuses: If the fuse associated with any other circuit is operated, replace the operated fuse with one of the proper type and capacity.

(b) Frame Fuses: If this fuse has operated, remove the fuse head of the fuse mounting by turning the handle in a counter clockwise direction and remove the head from the body of the fuse mounting. Replace the head with a spare head equipped with a good fuse and secure the head in place by turning the handle in a clockwise direction and latch the slots in the handle under the two screws.

(c) Battery Distributing Fuse: If this fuse has operated, first replace the N.E.C. (cartridge type) and then replace the alarm type fuse.

(d) Frame Filter Fuse: When cartridge type fuse is employed, proceed as outlined in (c) otherwise proceed as outlined in (b).

3.02 If the new fuse operates proceed as follows:

(a) District Link Secondary Hold Magnet Fuses: With the switches out of service on which the hold magnets are mounted, first make busy the five junctors associated with the operated fuse and then clear the trouble in the approved manner and replace the operated fuse. After the trouble has been cleared, restore the switches to service and remove the make busy plugs from the junctors.

(b) All Other Cases: Clear the trouble in the approved manner and then replace the operated fuse. If necessary, in order to guard service, make the circuits busy until the trouble has been cleared.

3.03 Main Equalizing Center Discharge Fuse

If the operated fuse is due to causes other than traffic overload proceed as follows:

(a) Failure due to a defective fuse.

(1) Operate the equalizing center discharge fuse shorting-out switch to throw the load on the auxiliary fuse and remove the operated alarm fuse.

(2) If there is a considerable traffic load through the office at the time of the failure, it will be advisable to block the CA and CB relays of several line link and controller circuits non-operated before operating the shorting-out switch.

Note: Before blocking these relays, consult the list prepared by the Traffic Department for line load control in the office.

Replace the operated discharge fuse with one of the proper type and capacity.

(3) Restore the shorting-out switch to its original position and replace the alarm fuse.

(4) Remove the blocking tools from any CA or CB relays which may have been blocked as a result of this failure.

(b) Failure Due to Trouble Condition

(1) Clear the trouble and then proceed as outlined in (a) 1 to 4 under paragraph 3.03.

3.04 Blown Fuse Due to Traffic Overload

(1) Shut down all test frames.

(2) Deny originating service to one or more line link frames, depending on local conditions, by blocking non-operated the CA and CB relays of the associated controller circuits.

Note: Before blocking these relays, consult the list prepared by the Traffic Department for line load control in the office.

(3) Operate the equalizing center discharge fuse shorting-out switch to throw the load on the auxiliary fuse and remove the operated alarm fuse.

(4) Replace the operated discharge fuse with one of the proper type and capacity.

(5) Restore the shorting-out switch to its original position and replace the alarm fuse.

(6) Restore the CA and CB relays of one of the line link frames in accordance with the list prepared by the Traffic Department for line load control in the office. Restore the remainder of the frames to service as soon as the office load permits.

(7) If the overload persists for any appreciable length of time, proceed in accordance with the instructions covering originating and terminating load control as outlined in Section 216-106-301.

4. REPORTS

4.01 Any required record of the use of this procedure should be entered on the proper form.