EQUIPMENT ALARMS OVERVIEW

CONTENTS PAGE

1. GENERAL

1.01 This practice:

- Introduces the practices on equipment alarms.
- Provides general information on equipment alarms.

NOTE: This practice does not specify the tvpes of visible and audible indications. See the office drawings and manufacturer's documentation for each type of equipment.

2. EXPLANATION OF EQUIPMENT ALARMS PRACTI ES

2.01 The equipment alarm practices are:

NUMBER	TITLE
705-000-001	Alarms for Electromec ianica Switching Equipment
205-000-002	Alarms for Electroni Switching Equipment
205-000-003	Alarms for Toll Equipment
205-000-004	Alarms for Carrier and Radio Facilities
205-000-005	Alarms for Switching Equipment Support Systems
205-000-006	Alarms for Peripheral Equipment

2.02 These practices categorize the alarms for the various types of equipment and provide the following information about each type of alarm:

EACH PRACTICE IDENTIFIES. ..	WHICH INDICATES. ..
Type of alarm	The specific system (e.g., Leich, GTD-5 EAX).
Visibility	Whether the alarm is visible on a shelf or bay and/or aisle.
Audibility	Whether the alarm is indicated audibly (e.g., bell, gong,buzzer, horn).
Status of the alarm	Whether the manufacturer and GTE designate the alarm as major or minor.
Resettability	If the alarm can be retired by operating a key or button.
Remote monitoring	If the alarm indication appears at an alarm panel in a remote location (e.g., SSOC, SSSC).
References	Material dealing with the described system.

Definitions and Acronyms

2.03 ALARM - An audible and visible means of indicating malfunctions and equipment failures.

2.04 CO - Central office.

7.05 MAJOR ALARMS - Alarms:

- Caused by faults which affect a large portion or all of the service in the central office.
- Indicating such things as:
  - Second trial failures of markers.
  - Interruption or failure of power.
  - Time-out conditions of common equipment (e.g., senders, markers, reqisters).

WARNING: Major alarms require immediate attention. If the office is unattended. a visit must he made by a maintenance person to clear the trouble.

2.06 MINOR ALARMS - Alarms:

- Caused by faults affecting only a small portion of the service in the central office.
- Indicating such things as:
  - Marker first trial failures.
  - Busy conditions (e-g.. markers. registers, senders).
  - Minor faults not affecting the overall operation of the switching eauipment.

2.07 REMOTE LOCATION - A central place used for monitoring alarms in other offices.

2.08 SSOC - Switching Service Operation Center.

2.09 SSSC - Switchinq Service Support Center.

3. ALARM FACILITIES

3.01 This section describes the central office (CO) alarm facilities discussed in this series of practices. Exhibit provides an example of a typical CO alarm layout.

Typical CO Alarm Layout

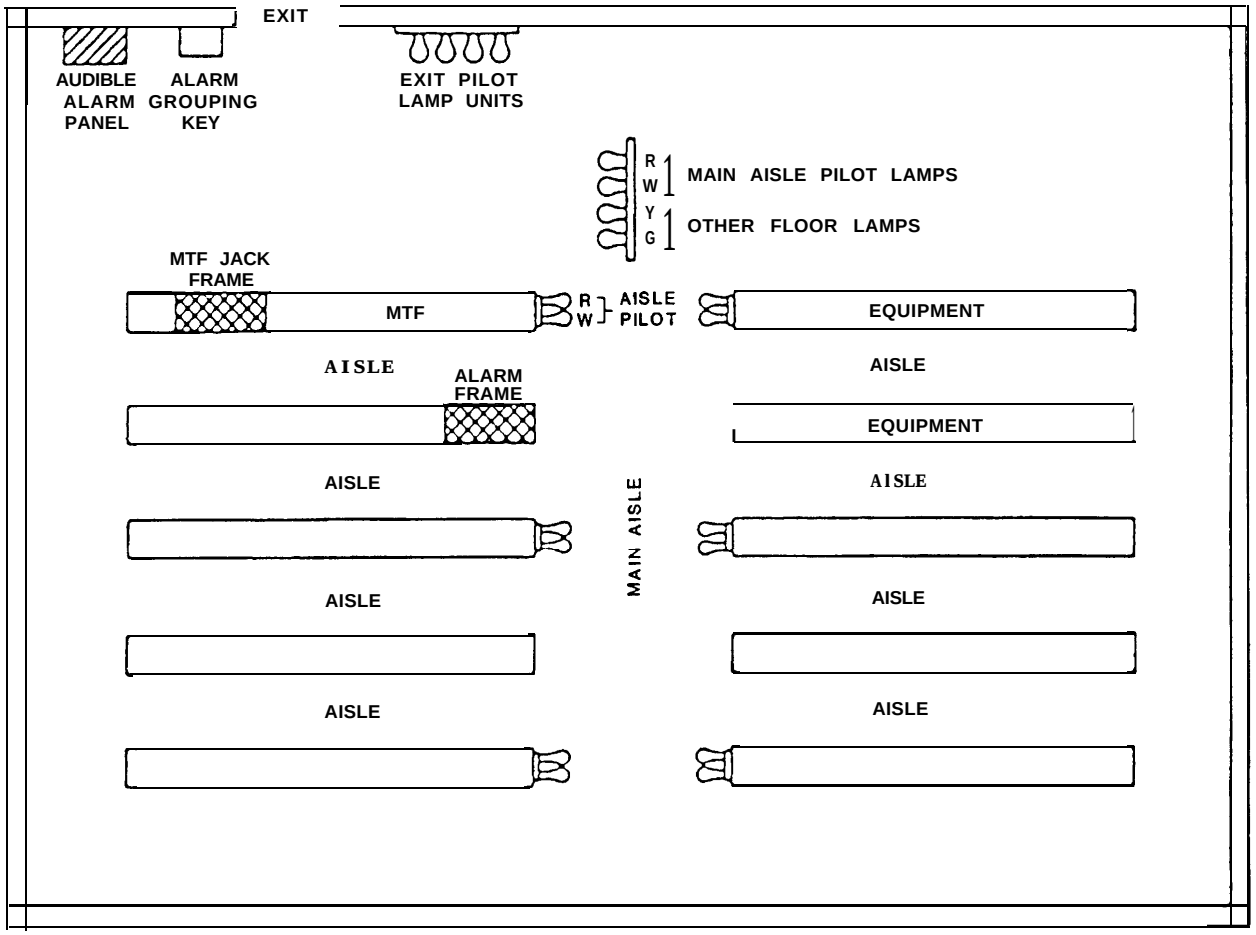

Exhibit 1

3.02 OFFICE ALARM FRAME - A single bay frame where alarm control units are mounted.

3.03 ALARM CONTROL UNITS - Relay circuits which control the operation of lamps and audible signals.

3.04 MAIN AISLE AND OTHER FLOOR PILOT LAMP UNIT - A lamp mountinq unit:

- Located at the intersection of the main aisle and a cross aisle.
- Equipped with four lamps as follows:

IF THE LAMP IS....	IT IS INDICATING A. ..
Red	Major alarm on the floor where the unit is mounted.
White	Minor alarm on the floor where the unit is mounted.
Yellow	Major alarm on some other floor.
Green	Minor alarm on some other floor.

NOTE: This describes a typical unit. The unit's specifications can vary depending on the:

- Type of equipment.
- Manufacturer.

3.05 FRAME AISLE PILOT UNITS - A metal box-type assembly mounted on a frame end guard at the end of each frame aisle. It contains:

- Two control relays.
- A unit terminal strip.
- A various number of lamp sockets which indicate major and minor alarms.

NOTE: This describes a typical unit. The unit's specifications can vary depending on the:

- Type of equipment.
- Manufacturer.

3.06 INDIVIDUAL FRAME OR CIRCUIT ALARM INDICATING LAMP - The lamps that indicate the frame, circuit, or panel where the trouble is located. These lamps are normally located at the bottom of a frame or at the circuit unit where the alarm condition is located.

3.07 A TYPICAL EXIT PILOT LAMP UNIT - A lamp mounting that:

- Provides space for four lamps.
- Serves:
  - Three switching floors and *one* power room.

    OR

  - Four switching floors.
- Is mounted near exits of the switchroom.

One lamp represents the power room; the others represent each of the other floors. A lighted lamp indicates trouble on the floor represented by the lamp. Floor designations are stamped on the unit.

NOTE: The lamp that represents the floor where the assembly is located is omitted.

3.08 AUDIBLE ALARM PANEL - A panrl located on the equipment floor that consists of sound making devices (e.g., tone bars, bells, gongs) which indicate:

- Major and minor alarms.
- Power failure.

4. ALARM CIRCUIT

Requirements

4.01 The alarm system will:

- Make an indication audibly and visibly to maintenance when an alarm condition exists.
- Differentiate between major and minor alarms.
- Transfer alarms to another location when the central office is unattended.

Functions

4.02 Whenever an alarm operates, it will:

- Light the:
  - Individual frame light.
  - Aisle pilot lamp for that aisle.
  - Main pilot for that floor.
  - Exit pilot lamps on all other floors.
- Sound an audible signal on the floor where the trouble has occurred.
- Operate the alarm sendinq circuit from the alarm receiving circuit
- Extend the continuity of the Z-conductor trunk to a distant alarm receiving circuit.

4.03 Other floor lamps and audible siqnals on other floors are:

- Optional.
- Dependent *on* the arrangement of the grouping keys on each floor.