General Requirements for Fire Alarms Systems

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1. Overview

1.01 **The purpose of this practice is to establish the general fire and life safety requirements applicable to FIRE ALARM SYSTEMS in all buildings and facilities where AT&T employees or network equipments are located. All AT&T operations and locations (owned and leased) worldwide shall comply with this practice. Where any state or local codes, laws, or regulations of the public authorities having jurisdiction at the location impose more stringent requirements than those cited in this practice, those codes, laws, rules, or regulations shall be followed. This practice has been issued to standardize the loss prevention guidelines throughout the corporation and to relect changes in the fire codes and corporate policy.**

1.02 **This is the initial issue of this practice. Whenever this practice is reissued, the reason(s) for reissue will be listed in this paragraph. This practice consolidates and supersedes the applicable sections of Corporate Instruction (CI) 76.203 "Fire Protection Equipment," Section 9, which has been canceled.**

1.03 **This practice does not contain any admonishments.**

1.04 **We in AT&T welcome your comments on this practice. Your feedback will be used to improve the quality of this and other AT&T customer documentation. Please use the feedback form provided for this purpose.**

1.05 **Additional copies of this practice may be obtained from the Customer Information Center by calling 1-800-432-6600 or 1-317-352-8557 (commercial) or by completing Form IND1-80.80 and mailing it to:**

AT&T Customer Information Center
Attention: Order Entry Department
2855 North Franklin Road
P.O. Box 19901
Indianapolis, IN 46219-1999
U.S.A.

1.06 **This practice does not contain a disclaimer notice.**

1.07 **This practice does not contain a FCC WARNING.**

1.08 **This practice does not contain a security statement.**

1.09 **This practice was issued by the AT&T Corporate Environment and Safety Engineering Organization. Refer questions concerning its content to contacts listed in AT&T 760-630-105, Appendix 1.**

2. General Information

2.01 This practice is based in part on the following:

- **National Fire Protection Association (NFPA) Standard No. 72**
- **Various model building and fire prevention codes**
- **Occupational Safety and Health Administration (OSHA) regulations**
- **Requirements of our corporate insurance carriers**
- **Americans with Disabilities Act - 1992**
- **Other AT&T Practices and guidelines.**

If this material is not readily available for reference, contact the Corporate Fire Protection Engineer listed in the attached Appendix 1.

NOTE:
Where NFPA Standard 72 is not recognized locally by the Authority Having Jurisdiction, the equivalent local standard should be applied.

2.02 Where any local or state codes, laws, or regulations of the public Authorities Having Jurisdiction at the location impose more stringent requirements than those cited in this practice, those codes, laws, rules, or regulations shall be followed.

Exception: Where a legally authorized variance has been granted by the Authority Having Jurisdiction, in writing, to specific requirements of a local code, law, rule, or regulation which is more stringent than this practice.

2.03 Where local conditions indicate the practical desirability of deviating from the requirements of this practice, the Fire Protection Engineering Manager should be consulted for guidance in achieving equivalent levels of protection by alternate means.

2.04 The following four definitions, also contained in the glossary, are fundamental to the understanding of this practice.

- **Shall indicates a requirement for compliance with this practice.**
- **Should indicates a strong recommendation which is not required.**
- **Listed refers to a requirement which is satisfied it the equipment, component, or device has been tested and certified by an independent testing laboratory. In the United States, either Underwriters Laboratories (UL) or Factory Mutual (FM) are generally accepted. In Europe, laboratories certified by European Electrotechnical Committee for Standardization (CENLEC), such as the British Approvals service for Electrical Equipment in Flammable Atmospheres (BASEEFA) and Physikalisch-Technische Bundesanstalt (PTB) in Germany, are accepted. Many other testing laboratories are accepted in other areas of the world. Some of the better**
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known labs include the Canadian Standards Association (CSA), the Standards Association of Australia (SAA), and the Research Institute for Industrial Safety (RIIS) in Japan. Listings or approvals granted by these or similar recognized agencies will satisfy this requirement.

- **Approved refers to acceptance by the Authority Having Jurisdiction at the particular company location.**

2.05 All signs and labels shall be in the appropriate language(s) of the resident workforce.

3. Types of Protective Alarm Systems

3.01 Central Station - An approved office to which remote alarm and supervisory signaling devices are connected. Personnel are in attendance at these offices at all times to supervise the circuits and investigate signals. The central station employs competent and experienced operators who will, upon receipt of a signal, take appropriate action. Such offices are controlled and operated by a person, firm, or corporation whose principal business is the furnishing and maintaining of supervised signaling services.

3.02 Local - A system that generates and sounds an alarm locally (at the immediate vicinity of the signal generating device) and does not automatically transmit an alarm to a distant station or to fire authorities. The alarm may be triggered by the manual operation of a fire alarm box, by the operation of protection equipment or systems (such as water flowing in a sprinkler system or discharge of Halon 1301 or carbon dioxide), the detection of smoke, or the detection of heat. Someone must be present to initiate an alarm signal to the distant station or to fire authorities.

3.03 Proprietary - A protective signaling system in a centrally located station serving one or more company locations, which is under constant supervision by competent and experienced personnel. The intent is that a proprietary system will serve a single building or complex of buildings under a common operational control. Noncontiguous company properties may be served by a single system. The system includes equipment and other facilities required to permit the operators to test and operate the system and, upon receipt of a signal, to take the necessary action. The system is maintained and tested by the company or their designated representative. The system is similar to a Central Station System but belongs to the owners of the protected property.

3.04 Remote Station - A system of electrically supervised circuits employing a direct circuit connection between the signaling devices at the protected properties and signal receiving equipment at some remote station (such as a municipal fire headquarters, a fire station, police station or other acceptable location.)

4. General Requirements and Approvals

4.01 **Each location shall be provided with a fire reporting and alarm systems for reporting the presence of a fire, summoning fire fighting personnel (Building or Plant Emergency Organization) and/or alerting the employees in the fire zone. The system signals the need for necessary emergency action as called for in AT&T 770-300-200, Building Emergency Action Plan.**

Exception: A location small enough so that a single voice from a stationary point can be heard in all parts of the facility may rely on voice signaling only.

4.02 **All devices, components, combinations of devices, or systems constructed and installed shall be listed and approved.**

4.03 **All new installations and modifications to existing fire reporting and alarm circuit wiring for interconnecting systems components shall conform to the requirements of the latest issue of the applicable national codes or design practices. In the U.S., systems shall comply with the NFPA 70 (National Electrical Code), NFPA 72 Standard for Installation, Maintenance and Use of Protective Signaling Systems, and NPFA 72E Standard on Automatic Fire Detectors. The appropriate Authority Having Jurisdiction (AHJ) should be contacted to obtain the necessary permits and inspections.**

4.04 **The proper installation of fire reporting and alarm systems is a critical element of facility protection. Plans for major changes to existing alarm systems and proposed new systems should be submitted to interested insurance companies. Plans should also be reviewed with Corporate Fire Protection Engineering and the appropriate Regional Environment and Safety Organization. The intention of this paragraph is to enhance system performance and reliability, ensure that systems meet minimum engineering criteria, and avoid problems already identified and resolved at other facilities.**

5. Fire Reporting and Alarm Systems

5.01 **The fire reporting and alarm system should consist of the following:**

- **Proprietary alarm system (should be provided with an automatic delinquency signal connected to a Central Station), or**
- **Central Station system**

5.02 The fire reporting and alarm system shall produce a distinct signal. Where system zoning is required because of building or facility arrangement, the signal shall be an:

- **Electrically supervised code-sounding fire alarm system, or**
- **Emergency reporting telephone system supplemented with signal circuits for the transmission of coded fire alarm signals throughout the building.**

Paging systems may be used as a supplement to, but not in lieu of this systems.

5.03 Fire reporting stations or alarm boxes shall be distributed throughout the premises so that they are unobstructed, readily accessible and prominently located in the normal path of exit from the area protected. The location of the boxes shall be as follows:

(a) At least one box shall be provided on the first floor and on each succeeding floor.

(b) Travel distance from any point in any building to the nearest alarm box or fire reporting station shall not exceed 200 feet.

5.04 Facilities for directly signaling a public fire department or a central station may also be provided. Alarm boxes provided for these purposes shall be identified with a sing to indicate their specific function.

5.05 All sprinkler systems having more than 20 heads shall be provided with a local water flow alarm to sound an audible signal on the premises upon water flow through the system. The alarm shall provide a signal in response to a flow equivalent to the discharge from a single head at the hydraulically most remote part of the system.

5.06 All new fire reporting or alarm boxes shall be mounted with the bottom of the box at a height of 4 feet above floor level or at some height easily accessible by all persons, including wheelchair occupants.

6. Audible and Visible Devices

6.01 The following requirements shall be standard for AUDIBLE DEVICES where provided:

(a) The operation of any of the fire alarm stations shall sound its alarm signal on such signal devices of the system as prescribed by the local functional organization. The alarm signal shall be distinctive. It shall be such that it cannot be confused with any other signal in use at the facility, or with any other common noise or signal. The signal shall continue to sound until manually reset by a responsible person who is knowledgeable in alarm system operation.

(b) Bells, signal horns, and other audible devices shall produce distinctive signals which are sufficiently loud (15dBa above the normal ambient noise level) to be heard above other noises in the area.

(c) Such devices shall be arranged and distributed so all occupants can hear alarms at all times. Special attention should be given to such areas as manufacturing, electronic data processing, conference, telephone equipment, laboratories, etc. that are not occupied on a regular basis or are otherwise isolated by soundproofing or construction.

(d) If provided, coded signals shall consist of single blasts that represent the code number of the station operated, repeated for at least three complete cycles. Code numbers shall consist of either two or three digits and shall be posted in conspicuous places throughout the building.

6.02 The following requirements shall be standard for VISIBLE SIGNALING DEVICES where provided:

(a) Such devices shall operate simultaneously with audible signaling devices and shall continue to operate until manually reset by a responsible person who is knowledgeable in alarm system operation.

(b) Devices shall be carefully located and distributed throughout the building so as to be visible from every point in the building.

(c) All new installations and modifications to existing visible signal systems shall conform to the requirements of the latest issue of the applicable national, state, and local codes or design practices.

6.03 In multi-story administrative or joint administrative/telephone equipment occupancies, the use of the following alternative fire alarm configurations may be implemented when approved by the local AHJ:

(a) Phased Evacuation - The audible fire alarm, when activated by a detector or manual station, shall sound on the floor from which it originates, the floor above and below, and in addition, at the fire command station, guard station, or another 24-hour manned location within the building. This type system must have the provisions for manually activating the audible fire alarm on all floors of the building. After verification of the hazard, activation of the fire alarm system shall be controlled from the fire command station, guard station, or another 24-hour manned location within the building.

NOTE:

This option may only be implemented in buildings or facilities having a 24-hour manned location within the building.

(b) Pre-evacuation Signal - The detectors or manual station shall activate an audible preevacuation fire alarm on all floors of the building. After verification of the hazard, an evacuation alarm would be activated manually from the fire command station. The preevacuation and the evacuation alarms shall be separate and distinct so as to minimize the possibility of confusion.

7. Annunciator Panels/Consoles

7.01 **The control center or console shall be a listed system. This unit shall be located in Protection Headquarters (a location or room physically secure and protected from any external damage sources) unless another location is approved by the Fire Protection Engineering Organization, and is manned at all times. Recording equipment shall be located convenient to the console and shall be arranged to provide printed records showing the day, time and identification of any alarm received or transmitted.**

7.02 **Provisions shall be made whereby the console attendant can activate the fire alarms in any or all of the individual fire areas throughout the facility.**

7.03 **When a proprietary system is provided, the console shall be located in Protection Headquarters and be manned at all times. The telephone reporting system necessitates a continuously-manned console.**

7.04 **Systems shall automatically transfer an unacknowledged alarm signal to another attended location or to a Central Station, municipal fire department or local police department (delinquency signal).**

8. Remote Alarming

8.01 **In buildings where maintenance and/or security personnel are not in attendance on a 24-hour basis, the fire alarm shall be remoted to a 24-hour attended location. At that location the alarm shall be identifiable as a fire alarm. Trouble alarms shall also be remoted to the 24-hour attended location.**

Note: **For facilities with alarms presently being routed to remote monitoring centers (for example, Transport Service Centers [TSCs], Technical Control Centers [TCCs], Security Control Centers [SCCs]) fire alarms shall appear simultaneously both on-site and at the off-site remote monitoring center.**

8.02 **Central Offices and other Network buildings housing equipment that provide Priority #1 service (Network critical locations: 4 ESS™, 5ESS®, Network Control Points [NCPs], Signal Transfer Points [STPs], large Points of Presence [POPs], major fiber hubs, etc.) shall be directly connected to the local fire department where possible, or shall be connected to a Central Station service which will notify the local fire department immediately on receipt of an alarm.**

Note: **Priority #1 service has been defined and established based on an assigned level of "Network criticality" in a letter of strong recommendation C-SR-89-10-014 issued October 16, 1989. It is further defined "as any location which has the potential to isolate large geographical areas or major customers with an extended restoration time(days or weeks)".**

8.03 **All fire alarm systems shall transmit an unambiguous, discrete signal to all monitoring centers. Environmental or high temperature alarms shall not be used as fire alarms. Remote monitoring centers shall consider all alarms of fire a priority alarm and shall take immediate action on receipt of each fire alarm.**

8.04 Economic considerations shall not be the only determining factor when consideration is being given to disconnecting any fire alarm presently being remoted to an outside agency such as a Local Fire Department or Central Station. Alternative solutions should be reviewed with Corporate Fire Protection Engineering.

9. Remote Fire Annunciator Panels

9.01 Remote annunciator panels in multizone systems provide visual fire and trouble alarm indications, as well as zone indications similar to those provided at the central control location. Remote annunciator panels generally display information in one of three formats:

- **A diagram of the floor or building with colored lights indicating the zone or device in alarm**
- **A panel of labeled indicator lights supplemented by appropriate floor plans as necessary**
- **A coded computer display terminal.**

9.02 A remote fire annunciator panel shall be provided on each floor. The floor has the central control equipment may not require one. Some large floors or areas may require more than one remote annunciator panel. From any location in the building, there should be a remote annunciator panel within a maximum travel distance of 300 feet.

9.03 In large buildings, remote annunciator panels that provide full duplication of information can become very complex. A less costly and less complicated system would be to limit the information provided on remote panels to detailed information for only that area or floor, plus a less specific indication of alarms in other areas or floors.

9.04 Remote annunciator panels should be located in the same relative position on each floor in a multifloor building.

9.05 Remote annunciator panels on each floor shall be located in readily accessible areas such as :

- **Elevator lobbies**
- **Corridors near elevators**
- **Near main stairwells in buildings without elevators**
- **Or any other location required by the Authority Having Jurisdiction.**

10. Power Supply

10.01 The primary power source provides power to operate the system under normal conditions. Power connections to the system equipment shall be made through dedicated branch circuits or separate feeders to minimize power outage due to minor faults. These branch circuits should be labeled "Fire Alarm Circuit Control" so that the system is not inadvertently disconnected. Mechanical protection such as metal conduit should be provided so that system wiring will not be impaired due to physical damage.

10.02 The primary power source may consist of anyone of the following:

- Light and power service (utility or privately owned)
- Turbine-driven generator
- Diesel-driven generator.

10.03 A diesel or turbine-driven generator should only be used for primary power where a trained operator is on duty.

10.04 A secondary power supply shall be provided to supply energy to the system in the event of a primary power supply failure. It should be designed to provide power for a 24-hour period and should be sized to supply all services essential to the operation of the alarm equipment. In a Central Station this includes lighting, heating and air-conditioning, and communications equipment. A small system may require only power to the alarm system and associated communications equipment. Power requirements or nonessential equipment and systems are not usually included since this will tend to increase the required size of the supply and may subject the supply to impairment.

10.05 The secondary supply may consist of any one of the following:

- Light and power service (if the primary power supply is from a different source)
- A storage battery with a 24-hour capacity
- Multiple automatic starting engine-driven generators capable of supplying power to the essential system elements under maximum normal load when the primary generator is out of service.

11. Final Acceptance

11.01 All systems shall be tested and inspected at the time of final acceptance. This activity should involve the combined efforts of the contractor's representative, the manufacturer, the Authority Having Jurisdiction (if required), and Building Operations personnel. Operating and maintenance manuals as well as schematics shall be available at this time.

11.02 Acceptance testing shall include the operation of every initiating device, indicating device, relay, automatic door releasing device, automatic lock releasing device, remote station monitoring device, interlocking devices with the ventilation system, tamper switches, supervisory devices, and any other devices which are a part of the system, or are connected to the system. No system shall be accepted as complete until all devices, connections, and interlocks are functioning as designed.

11.03 All maintenance manuals, copies of test records, and brochures shall be presented to the building operations force at the time of final acceptance.

11.04 The insurance carriers should be advised of the scheduling for the final acceptance testing and invited to attend.

12. Inspections, Tests and Maintenance

12.01 Inspections and tests of reporting stations, alarm boxes, initiating devices, manual pull stations, audible signal devices and other component parts of the fire reporting and alarm system shall be made in accordance with the manufacturer's instructions, NFPA standards, AT&T Practice 770-330-200 and as follows:

- **Nonsupervised alarm systems and their connection to the remote monitoring location shall be tested every 2 months.**
- **Supervised alarm systems and their connection to the remote monitoring location shall be tested quarterly.**
- **Tests shall be performed by the actual activation of the initiating devices and not by a simulated activation.**
- **Where failures indicate problems with reliability of any part of the system, complete system tests shall be conducted monthly.**

12.02 A different actuation device shall be used in each test of a multi-initiating device system so that:

- **No individual device is used for two consecutive tests and,**
- **Sufficient numbers of such devices shall be checked so that all devices are checked once per year.**

12.03 All alarm systems shall be restored to normal operating condition as promptly as possible after each test or alarm. Correction of faulty conditions shall be made immediately. Spare alarm devices and component parts subject to wear or destruction shall be available for prompt restoration of the system. Records of inspections shall be kept in sufficient detail so that corporate, insurance company and/or Authority Having Jurisdiction inspectors can verify the scope and adequacy of each test.

12.04 Where patrol service is provided, the patrol service shall be responsible for continuos surveillance (not requiring record keeping) of all reporting stations and alarm boxes to give reasonable assurance that the fire reporting and alarm system is accessible and operable. Each guard assigned to patrol service is responsible during his first tour to observe that all reporting systems and alarm boxes are visually satisfactory. Any alarm initiating device or fire reporting station found to be damaged, obstructed or otherwise inoperable, shall be reported to the patrol service supervisor at the completion of the tour for the immediate and appropriate corrective action.

12.05 Maintenance of the audible alarms and their power circuits shall be the responsibility of the local functional organization, and shall be performed by persons trained and knowledgeable in the operation and maintenance of the alarm systems and their associated circuits.

12.06 When the maintenance of this type of system and its components falls within the jurisdiction of another agency, the functional local organization shall notify that agency's designated Service Representative immediately of any need for maintenance, repairs or other service.

13. Special Applications

13.01 A fire alarm and communications system shall be installed in compliance with the requirements for high-rise business buildings of the applicable building code, except as may be modified by local authority having jurisdiction. The system shall be in accordance with the applicable sections of NFPA 72, NFPA 70 article 760, and NFPA 72G shall be followed where applicable. All equipment shall be listed.

13.02 The fire alarm system shall be one of the following types:

- **Hard-wired or point wired,**
- **Multiplex (time division or frequency division), or**
- **Combination of point wired and multiplex.**

The performance of the fire alarm system, if integrated with other systems, shall take precedence.

14. Reference Documents

14.01 The following Referenced Documents are associated with this practice:

Number	Title
AT&T LETTER C_SR_89-10-014	Fire Protection Recommendations in Telephone Buildings, October 16, 1989
AT&T 770-330-200	Inspection, Testing and Maintenance of Local, Auxiliary, Remote Station, and Proprietary Signaling Systems
AT&T 770-300-211	Emergency Action Plans
AT&T 770-340-200	Guidelines for Conducting Orientations with Local Fire Departments
AT&T 760-650-505	Patrol Services
NFPA 70	National Electrical Code - 1990
NFPA 72	Installation, Maintenance and Use of Protective Signaling Systems - 1990
NFPA 72G	Installation, Maintenance and Use of Notification Appliances for Protective Signaling Systems - 1989
NFPA 72E	Standard on Automatic Fire Detectors

Glossary

The following definitions are generally in conformance with those used in NFPA standards, and therefore have specific meaning to the alarm industry. Minor changes have been made to clarify their application to Company locations. Some definitions have been included that do not have direct application to this practice because they may be found in related standards that are commonly consulted.

A

Active Multiplex System
A multiplexing system in which transponders are employed to transmit status signals of each initiating device circuit within a prescribed time interval. Also see multiplexing.

Adverse Condition
Any condition that may interfere with the proper transmission and/or interpretation of status change signals at a central station or satellite station.

Alarm Service
The service required following receipt of an activation of any of the following:

- **Manual operation of a fire alarm box**
- **Transmission of an alarm indicating the operation of protective equipment of systems (such as an alarm from water flow in a sprinkler system or the discharge of Halon 1301 or carbon dioxide)**
- **Detection of smoke**
- **Detection of excessive heat**
- **Transmission of an alarm from another protective system.**

Alarm Signal
A signal indicating an emergency requiring immediate action, such as a signal indicating fire (received from a manual box, a water flow detector, and automatic fire detector, etc.) or other emergency signal.

Annunciator
A unit containing two or more identical targets or indicator lamps in which each target or lamp indicates the circuit, condition, or location from which a signal is received.

Approved - Refers to acceptance by the Authority Having Jurisdiction at the particular company location.

Authority Having Jurisdiction - The organization, office, or individual responsible for "approving" equipment, and installation, or a procedure.

NOTE:
The phrase "authority having jurisdiction" is used in a broad manner since jurisdictions and "approval" agencies vary, as do their responsibilities. Where public safety is a primary concern, the "authority

having jurisdiction" may be a federal, state, local, or other regional department or individual such as a fire chief or fire marshal, chief of a fire prevention bureau, labor or health department, building official, electrical inspector or others having statutory authority. For insurance purposes, and insurance inspection department rating bureau, or other insurance company representative may be the "authority having jurisdiction". In other circumstances, Corporate Fire Protection Engineering (see Appendix 1 for contact information) will be the "authority having jurisdiction".

B

Building Critical Process Alarm

An alarm system used to supervise the functioning of a process such as manufacturing operations, heating or refrigerating systems, temperature control, etc., when failure of the supervised process could result in fire or explosion.

Building Management Service System

A system used to supervise normal building operations, manufacturing process, or other operations where an abnormal condition does not constitute a fire or explosion emergency.

C

Central Station System

A system, or group of systems, that automatically signals, records, maintains, and supervises the operations of circuits and devices from an approved central station.

Channel

A path for signal transmission between two or more stations or channel terminations. A channel may consist of wire, lightguide, radio waves, or equivalent means of signal transmission.

Circuit

The conductors or radio channel, and associated equipment used to perform a definite functioning connection with an alarm system.

Coded

Coded signals are audible or visible signals and convey several bits or units of information (for example, a series of single blasts or flashes representing the code number of the station operated, repeated at least three complete cycles).

Combination System

A system that includes both emergency and non-emergency signaling systems. Emergency systems may include a local protective signaling system for fire alarm, supervisory or watchman service. Non-emergency systems may include a paging system, a musical program system, or a process monitoring service system. Operation of any of the components, wholly or in part, must not degrade or hazard the protective signaling system.

D

Delinquency Signal
A signal indicating that required action has not been taken by guards, system attendants, or their supervisors.

Distant Monitoring
This alarm service is provided through two or more organizations. One or more organizations install the equipment and provide testing and maintenance services. The monitoring organization is a central station which has the facility and personnel to receive, interpret and act on signals originating from protected properties that may be hundred of miles distant.

H

High Rise Building
Generally, high rise buildings are defined as buildings having floor surfaces used for human occupancy located more than six stories or 75 feet above the lowest level of fire department vehicle access. The exact definition should be determined by referencing the applicable local code.

I

Indicating Device Circuit
A circuit to which indicating devices are connected (for example, bells, horns, lamps, etc.).

Initiating Device Circuit
A circuit to which automatic or manual signal initiating devices are connected, including circuits that connect such devices directly to the central supervising station in the same or another building. In an active multiplex system, it is a circuit used to connect automatic or manual signal initiating devices or outputs of a control unit to a multiplex interface.

Initiating Device
A manually or automatically operated device, the operation of which either opens or closes a set of electrical contacts. A manual pull station is an example of a manually operated device and water flow, heat, smoke and flame detectors are examples of automatically operated devices.

L

Listed
Refers to a requirement which is satisfied if the equipment, component, or device has been tested and certified by an independent testing laboratory. In the United States, either Underwriters Laboratories (UL) or Factory Mutual (FM) are generally accepted. In Europe, laboratories certified by European Electrotechnical Committee for Standardization (CENLEC), such as the British Approvals Service for Electrical Equipment in Flammable Atmospheres (BASEEEFA) and Physikalisch-Technische Bundesanstalt (PTB) in Germany, are accepted. Many other

testing laboratories are accepted in other areas of the world. Some of the better-known labs include the Canadian Standards Association (CSA), the Standards Association of Australia (SAA), and the Research Institute for Industrial Safety (RIIS) in Japan. Listing or approvals granted by these or similar recognized agencies will satisfy this requirement.

Local Alarm System

A system that generates and sounds an alarm locally (at the immediate vicinity of the signal generating device). The alarm may be triggered by the manual operation of fire alarm box, by the operation of protection equipment or systems (such as water flowing in a sprinkler system or discharge of Halon 1301 or carbon dioxide), the detection of smoke, or the detection of heat.

M

Maintenance

Repair service, including periodic inspections and tests, required to keep the protective signaling system and its component parts in an operative condition at all times. The service provides replacement of the system or of its components, when for any reason they become undependable or inoperative.

Multiplexing

A signaling method, using wire path, cable carrier, radio, or combinations of these facilities, that is characterized by the simultaneous and/or sequential transmission and reception of multiple signals in a communication channel. This signaling method includes a means of positively identifying each such signal.

Municipal Fire Alarm Box

A fire alarm box (or "street box") that is connected directly to a fire department (etc.) and is not connected to a proprietary or central station system.

Municipality

Any government unit, such as a county, city, town, or fire protection district.

N

Noncoded

Noncoded signals are audible or visible signals and convey one discrete bit or unit of information (for example, successive blasts or flashes of the same duration, intensity or sound level of either a horn, bell or light generating device). Noncoded signals are generally not used or recommended for alarm systems.

O

Operator
A trained person, usually in Protection Headquarters of the central station, who receives an alarm and retransmits it to fire stations or other emergency agencies.

P

Protection Headquarters
A central location within a facility that is physically protected from any damage sources external to the room where alarms are received and retransmited to fire stations or other emergency agencies.

Protective Signaling Systems
Electrically operated circuits, instruments, and devices including necessary power supplies, designed to transmit alarms and associated supervisory and trouble signals.

Protective Systems, Equipment or Apparatus
Standpipes, automatic sprinklers, fixed extinguishing systems, and other devices used for extinguishing fire and for controlling temperatures or other dangerous conditions.

R

Repeater Facility
Equipment needed to relay signals between a central supervising station, satellite station, and/or protected premises.

Runner Service
Employees immediately available for prompt dispatching, when necessary, to the protected premises. These employees are in addition to operators required at the central supervising station. These employees should be at a runner station, or in a vehicle in constant radio contact with the central supervising station and located so the maximum response time to any protected facility is not to exceed 30 minutes driving time. The purpose of runner service is to respond to supervisory signals, and not to respond to fires.

S

Satellite Station
A satellite station is a normally unattended location remote from the central supervising station and linked by communication channel(s) to the central supervising station. Interconnecting of signal receiving equipment or communication channel(s) from protected buildings with channel(s) to the central supervising station is accomplished at this type of location.

Shall
Indicates a requirement for compliance with this practice.

Should
Indicates a strong recommendation which is not required.

Signaling Line Circuit

A circuit connecting transmitters or control units to the central supervising station over which fire alarm, water flow, guard tour, or supervisory signals are transmitted, whether entirely within a building or extending to other buildings.

Supervised

Monitoring of the integrity of a circuit, switch, or device in such a manner that a signal is received and recorded when the device is actuated or when the circuit is interrupted.

Supervisory Service

The service required to assure performance of guard patrols and the proper operation of automatic sprinkler systems and of other systems for the protection of property.

Supervisory Signal

A signal indicating the need for action in connection with either the supervision of guards, or with sprinkler and other extinguishing systems or equipment, or with the maintenance features of other protective systems.

T

Transmitter

A system component to which initiating devices or groups of initiating devices are connected. The component transmits signals to the central supervising station indicating the status of the initiating devices and the initiating device circuits.

Transponder (a Multiplex Interface)

A multiplex alarm transmission system functional assembly located at the protected premises. This assembly is capable of receiving interrogation signals from another location by way of a communication channel, and then supplying response signals indicative of the status of the signal initiating device circuits connected to it.

Trouble Signal

An audible signal and/or visual signal (lamp, target, etc.) indicating trouble any nature such as a circuit break or ground, occurring in the devices or wiring associated with a protective signaling system.

V

Visible Signal

The pulsing or flashing of a light or strobe that is part of a visible notification appliance.

Abbreviations and Acronyms

The following abbreviations and acronyms are used in this practice.

A

AHJ
Authority Having Jurisdiction

B

BASEEFA
British Approvals Service for Electrical Equipment in Flammable Atmospheres

C

CENLEC
European Electrotechnical Committee for Standards

CI
Corporate Instructions

CSA
Canadian Standards Association

F

FM
Factory Mutual

N

NCP
Network Control Point

NEC
National Electrical Code

NFPA
National Fire Protection Association

O

OSHA
Occupational Safety and Health Administration

P

PEO
Plant Emergency Organization

PTB
Physikalisch-Technische Bundesanstalt

R

RIIS
Research Institute for Industrial Safety

S

SAA
Standards Association of Australia

SCC
Security Control Center

STP
Signal Transfer Point

T

TCC
Technical Control Center

TSC
Transport Service Center

U

UL
Underwriters Laboratories

Information Contacts for Fire Alarm Systems

1. Overview

1.01 **This first issue of this appendix provides the current contacts with their addresses and phone numbers as specified by AT&T Practice 760-630-105, Fire Safety-General Requirements for Fire Alarm Systems.**

1.02 **Whenever this appendix is reissued, the reason(s) for reissue will be listed in this paragraph.**

2. Contacts Internal to AT&T

2.01 **AT&T Corporate Fire Protection Engineering**

- **Contact** **L. D. Arrington**
  Corporate Fire Protection Engineering Manager
  AT&T
  Room B-2222
  131 Morristown Road
  Basking Ridge, NJ 07920
  U.S.A.

- **Telephone** **1-908-204-8230**

2.02 AT&T Contract Services Organization Security

- **Contact** **E. Leitz**
  Product Manager - Security/Fire Safety
  Contract Services Organization -Security
  Room 4EA150
  One Oak Way
  Berkeley Heights, NJ 07922
  U.S.A.

- **Telephone:** **1-908-771-3658**
- **FAX:** **1-908-771-2461**
- **ATTmail:** **!eleitz**

2.03 AT&T Corporate Risk Management

- **Contact** **J. Cirone**
  Staff Manger, Risk Management
  Room 3EB102
  One Oak Way
  Berkeley Heights, New Jersey 07922
  U.S.A.

- **Telephone** **1-908-771-2986**

2.04 AT&T Customer Information Center

- **Contact** **AT&T Customer Information Center**
  Order Entry Department
  2855 N. Franklin Road
  P.O. Box 19901
  Indianapolis, Indiana 46219
  U.S.A.

- **Telephone** **1-800-432-6600 or 1-317-352-8557**

3. Notice of Issuance

3.01 This practice applies to all AT&T locations (national and International). Questions concerning its contents should be referred to:

L. D. Arrington
Manager, Corporate Fire Protection Engineering
Room B-2222
131 Morristown Road
Basking Ridge, New Jersey 07920

3.02 This practice was issued by the Corporate Fire Protection Engineering Organization.

FEEDBACK FORM

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Submitted by (optional)

Name:
Company:
Address:
Telephone Number:
Date:

Return to:

AT&T Organization: Corporate Fire Protection Engineering
Address: 131 Morristown Road, Basking Ridge, NJ 07920