

<FM > Central Station Placarding Program
CSAA/NAMSTE - April 2004

• CS Placarding Program
• Bob Elliott



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Agenda

- Primer on FM Approval Placarding
 - NFPA Code Requirements
 - Technical Merits of Placarding
 - Cost Structure
- Explain why you should be FM Approved

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- FM Approvals
 - Specialize in Fire Protection Products for the Industrial Commercial marketplace.
- Electrical/Systems Group
 - Test Equipment and Label Product
 - Safety issues & performance
 - Central Station Placarding Program
 - Authorized use of <FM> by a CS company for services associated with NFPA 72

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How the FM Placarding Program Works

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 - Qualify and Approve the Alarm Service Company
- The Approved Alarm Service Company
 - Issues and controls the Placard

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Get FM Approved, why?

- Separate yourself from the ordinary.
- Independent third party evaluation.
 - Listed
 - Approved
- It's required!
- Guaranteed follow-up verification
- The FM Approval mark.

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Vocabulary

- FM Approval Standard 3011
 - Full Service Company
 - Monitoring Only Company
 - Local Installer Company

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CS/RS/Proprietary or Protected Premises?



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NFPA “Central Station Service”

- 2 Third Party Options (ref. 8.2.4)
- Certification (ref. 8.2.4.1)
- Placarded (ref. 8.2.4.2)
 - Additional text exists in the Fundamentals chapters, ref. 3.3.31 and 4.5.2.4, but is incomplete for CS Systems.

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Placarded (NFPA 72/02, 3.3.131)

- A means to signify that the fire alarm system of a particular facility is receiving central station service in accordance with this code by a listed central station or listed fire alarm service-local company that is a part of a systematic follow-up program under the control of an independent third party listing organization.

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Prime Contractor (NFPA 72/02, 3.3.137)

- The one company contractually responsible for providing central station service to a subscriber as required by this code. The prime contractor can be either a listed central station or a listed fire alarm service-local company.

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Non-CS Systems (NFPA 72/02, 4.5.2.4)


- **Verification of Compliant Installation.** Where required, compliance of the completed installation with the requirements of this standard, as implemented via the referring code(s), specifications, and/or other criteria applicable to the installation, shall be certified by a qualified and impartial third-party organization acceptable to the authority having jurisdiction.

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(NFPA 72/02, 8.2.4)

- **Certificated or Placarded.** The prime contractor shall conspicuously indicate that the fire alarm system providing service at a protected premises complies with all the requirements of this code by providing a means of third-party verification, as specified in 8.2.4.1 or 8.2.4.2.




(NFPA 72/02, 8.2.4.2)

- The installation shall be Placarded
 - *This only appears under 8.2 Fire Alarm Systems for Central Station Service.*




(NFPA 72/02, 8.2.4.2.1)

- The fire alarm systems providing service that complies with all of the requirements of this code shall be conspicuously marked by the central station to indicate compliance.




(NFPA 72/02, 8.2.4.2.2)

- The marking shall be by one or more placards that meet the requirements of the organization that listed the central station and requires the placard.



(NFPA 72/02, 8.2.4.2.3*)

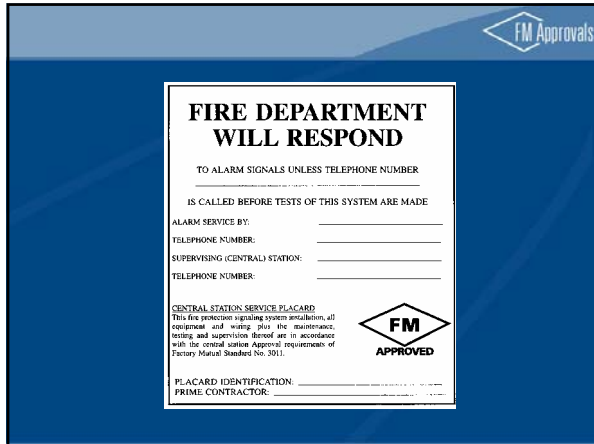
- The placard(s) shall be 130cm² (20in²) or larger, shall be located within 1m (36in) of the fire alarm system control unit, or if no control exists, on or within 1m (36in) of a fire alarm system component, and shall identify the central station by name and telephone number.



(NFPA 72/02, 8.2.4.3*)

- Fire alarm system service not complying with all requirements of Section 8-2 shall not be designated as central station service.

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If It's Not CS Service?

- Other NFPA forms of Supervising Station
 - Auxilliary
 - Municipal
 - Proprietary
 - Remote Station
- Local

Auxilliary (NFPA)

- An **Auxiliary Station System** allows *fire alarm* conditions to be received at the public fire communications center on the same equipment and by the same methods as an alarm transmitted manually from municipal fire alarm boxes located on the streets. These transmission lines are maintained by the Fire Department.

Proprietary (NFPA)

- A **Proprietary Station System** handles *fire alarm, supervisory and trouble signals* from protected properties under one ownership and received at a supervising station that is located in and operated by the owner of the property. This station is staffed by trained, competent personnel that are responsible to the owner of the property. ALARM signals are transmitted immediately to the FD.

Remote Station (NFPA)

- A **Remote Station System** fire alarm system receives *fire alarm signals* at the public fire service communications center, fire station or at a similar governmental agency that has public responsibility for taking prescribed action.
 - Continued -

Remote Station (NFPA)

- *Supervisory and trouble signals* may be received at a different location provided it is staffed by personnel trained to recognize the type of signal and take prescribed action.

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Local or Protected Premises (NFPA)

- A **Local System** indicates an alarm condition at the protected property by the activation of audible or visual indicating appliances to provide evacuation notification to the occupants of the property.

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Central Station (NFPA)

- A supervising station that is **Listed** for **Central Station Service**.

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Central Station Service (NFPA)

- The use of a system or group of systems in which the operations of the circuits and devices at a protected property are signaled to, recorded in and supervised from a Listed central station that has competent and experienced operators who upon receipt of a signal take such action as required by this code. - Continued -

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Central Station Service (NFPA)

- Related activities at the protected property such as equipment installation, inspection, testing, maintenance, and runner service, are the responsibility of the central station or a listed fire alarm service-local company. Central Station Service is controlled and operated by a person, firm or corporation whose business is the furnishing of such services or whose properties are the PP.

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A little history!

- FMRC 3011 - 1965
- NFPA 71 - 1989 – 1st time required Certification/ Placard!
- NFPA 72 - 1993 - combination kept this requirement!

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A little history!

- 72 - 1996 - text added in Ch. 1
- NFPA 72 - 1999 – 3pv expansion defeated
- FMRC 3011 - April, 1999 -01 w/new controls on Placarding
- NFPA 72 – 2002 – 3pv expanded or relaxed?

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8 Elements of *Central Station Service*

- installation
- testing
- maintenance
- runner service at the PP
- management oversight
- monitoring
- retransmission
- record keeping

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- **Facilities**
 - 5-2.3.1 & (.2) The central (subsidiary) station building or that portion of a building occupied by a central (subsidiary) station “shall conform to the construction, fire protection, restricted access, emergency lighting, and power requirements of the latest edition of ANSI/UL 827”, . . .

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- Fire Resistive Construction
- Limited/Controlled access
- Approved Receiving & Automation Equipment
- Power Supply Reliability
 - (60 hrs bat; 4hrs bat +1 gen; 15 min bat +2 gen).

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Battery Rack



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- **Procedures/Operations**
 - 24/7 two operators at all times
 - 24/7 runner service
 - fire response within 1 hr. (50mi)
 - trouble response within 4 hr (200mi)
 - maintain serialized list of all Placarded sites
 - proper interpretation & prompt dispatch of alarm signals

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- **Procedures/Operations**
 - alarm records available & maintained for 1 yr.
 - as-builts for Placarded sites
 - battery calcs, wiring diagrams, specs, floor plans, Record of Completion!
 - test & maint procedures and records

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- **Protected Premises**
 - compatible & Approved equipment
 - standby power = 24hrs
 - signaling system supervision
 - quality of equipment & installations
 - do the as-builts match?
 - do the test records match?


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 - do the test records match?

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“Quarterly/Semi/Annual Test”



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- Follow-up periodic re-exams of the CS by FM Approvals
 - 3-year cycle or annual
- Follow-up periodic site audits of the PP by **FM Approvals**, during all 1st & re-exams
 - FMGlobal loss consultants see both Standard and Non-Standard sites.
- **Why do we perform site visits?**

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“Creative Difference”




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What Does It Buy You? The CS Company


- Increased System Reliability
- Marketing via
 - 1300 field engineers
 - 55 offices
 - 60,000 insp/yr
 - 104 countries



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What Does It Buy You? The AHJ


- Increased System Reliability
- Systematic auditing service
 - Optional Reporting
 - Optional Service tests



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What Does It Buy You?

- It's not perfect!



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Increased marketing & recognition

- Listing in the FM Approval Guide.
 - 500 Categories
 - 50,000 products
 - 2,300 mfgs



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What Does It Cost You?

- Central Station Full Service = \$3,915
 - Third year Re-exams, = same fee or approx. \$1,300/year
 - Annual Re-exam, \$2,240
- LoCo, MonOnCo & SD = \$3,285
 - Third year Re-exam, = same fee or approx. \$1,100/year
 - Annual RE-Ex, \$2,240

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Summary

- Better understanding of NFPA 72!
- Better understanding of FM Approvals!
- Better understanding of Placarding!

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The Application Process

- Contact info:
 - 781 255-4832
 - robert.elliott@fmglobal.com
 - Bob Elliott
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The Application Process

- We supply you with a Proposal
 - Price quote, contract, preliminary info & payment requirements
- You return the contract and deposit
- We'll schedule a visit – 30days –
- Process a report – 15-30 days –

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Where to get more information?

- <http://www.fmglobal.com/approvals>
- <http://global.ihs.com>
- E-mail - robert.elliott@fmglobal.com