NFPA Standards

How These Affect the Communications Center

National Fire Protection Association
The authority on fire, electrical, and building safety
Who? What? Why?

- Jim Long
  - Northwest Fire District – Tucson
- Communications Coordinator
  - ?
- NFPA – ISO – Accreditation
  - The Right thing?
So Many Standards!

- APCO
- ANSI
- NENA
- NFPA
- WHO IS RIGHT?

STANDARDS
THEY ARE GREAT. EVERYONE SHOULD HAVE THEIR OWN.
National Fire Protection Association (NFPA)

• Established in 1896 – worlds leading advocate of fire prevention

• Mission: Reduce worldwide burden of fire and other hazards on the quality of life by providing consensus codes and standards, research, training and education.

• Membership: Over 81,000 worldwide
NFPA

• Influence every building, process, service, design, and installation in the U.S. and many of those used in other countries.

• Updates Every About 3-5 Years

• ‘Consensus’ Standards
  – “Well, everyone ELSE is doing it that way!”
NFPA Standards for Communications

• **BEFORE**
  – NFPA 1061
    • Job Performance Standards

• **DURING**
  – NFPA 1221
    • Processing Standards

• **AFTER**
  – NFPA 1710
    • Response Standards
NFPA 1061

• Standard for Professional Qualifications for Public Safety Telecommunicator
• 2007 Latest Edition
• Re-Write in Progress for 2012 Update
NFPA 1061

• The standard states that the Authority Having Jurisdiction (AHJ) has the responsibility to establish and provide the Telecommunicator with the applicable organizational mission statement, principles, philosophies, values, directives, policies, procedures, guidelines, rules, regulations, and descriptions of positions.
NFPA 1061

• NFPA 1061 does not specifically address certification as an EMD but lets your organization address which protocols, policies, procedures, etc. they wish to adopt if any to meet minimum job performance requirements.
NFPA 1061

• Chapter 4  Public Safety Telecommunicator I
  - Receive, Process, Disseminate
• Chapter 5  Public Safety Telecommunicator II
  - Receive, Process, Disseminate
• Chapter 6  Public Safety Telecommunicator III
  - Respond to Command Post of large incident
QUIZ: Can you spot a Telecommunicator I, II and III?
NFPA 1061

• In Need of A Re-write

• NFPA Needs Input

• APCO Working With NFPA To Consolidate Training As An ANSI Standard For 2012

• APCO Project 33
  – The APCO Project 33 Standard Committee is supportive of the recommendations of NFPA 1061 regarding Continuing Education and In-Service Training
NFPA 1221
Call Processing Standards
NFPA 1221

• Standard for the Installation, Maintenance and Use of Emergency Communication Systems.
• 2010 Standard
• Affects ALL responders, Fire/EMS/Police
• You can get your copy at NFPA.org
The mission of the communications center should be to serve as a conduit between those requesting services and those providing those services.
1221 & The Primary PSAP

- **3.2.2* Authority Having Jurisdiction (AHJ).** An organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.

- **7.4.3* For law enforcement purposes, the AHJ shall determine time frames allowed for completion of dispatch.**

- **7.4.4* Where alarms are transferred from the primary public safety answering point (PSAP) to a secondary answering point, the transfer procedure shall not exceed 30 seconds for 95 percent of all alarms processed. *(For documentation requirements, see 12.5.2.)*
1221 & Call Answering

• **3.3.1** Alarm. A signal or message from a person or device indicating the existence of a fire, medical emergency, or other situation that requires action by an emergency response agency.

• **7.4.1** Ninety-five percent of alarms received on emergency lines shall be answered within 15 seconds, and 99 percent of alarms shall be answered within 40 seconds. *(For documentation requirements, see 12.5.2.)*

• **7.4.1.1** Compliance with 7.4.1 shall be evaluated monthly using data from the previous month.
• 7.4.2* Ninety-percent of emergency call processing and dispatching shall be completed within 60 seconds, and 99 percent of call processing and dispatching shall be completed within 90 seconds. (For documentation requirements, see 12.5.2.)

• 7.4.2.1 Compliance with 7.4.2 shall be evaluated monthly using data from the previous month.
NFPA 1221 Time Standard

I have a Problem

Call 9-1

PRIMARY PSAP

Fire Alarm

How Long?

30 Seconds

15 Sec

60-90 Secs

Response
Other Important Definitions

- ERF – Emergency Response Facility (Stations)
- ERU – Emergency Response Units
### 1221 Monthly Report

#### December 2008

<table>
<thead>
<tr>
<th>CAD AREA</th>
<th>CALL COUNT</th>
<th>Meets '60 Second Standard</th>
<th>Meets 90 Second Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVRA VALLEY</td>
<td>83</td>
<td>47</td>
<td>68</td>
</tr>
<tr>
<td>GOLDER RANCH</td>
<td>495</td>
<td>282</td>
<td>422</td>
</tr>
<tr>
<td>MOUNTAIN VISTA</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>NORTHWEST</td>
<td>1037</td>
<td>587</td>
<td>892</td>
</tr>
<tr>
<td>PICTURE ROCKS</td>
<td>86</td>
<td>49</td>
<td>71</td>
</tr>
<tr>
<td>RURAL METRO</td>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>THREE POINTS</td>
<td>70</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td><strong>CONSORTIUM AGGREGATE</strong></td>
<td><strong>1775</strong></td>
<td><strong>1006</strong></td>
<td><strong>1515</strong></td>
</tr>
</tbody>
</table>

| TIME PERIOD AGGREGATE | 24783 | 13218 | 53.3% | 20037 | 80.8% |
NFPA 1710

• NFPA 2004 Version
• 3.3.37.2 Call Processing Time. See 3.3.37.3, Dispatch Time.
• 3.3.37.3* Dispatch Time. The point of receipt of the emergency alarm at the public safety answering point to the point where sufficient information is known to the dispatcher and applicable units are notified of the emergency.
NFPA 1710

• **3.3.37.4 Response Time.** The travel time that begins when units are en route to the emergency incident and ends when units arrive at the scene.

• **3.3.37.5 Turnout Time.** The time beginning when units acknowledge notification of the emergency to the beginning point of response time.
NFPA 1710 Times

• 5.2.4.1 Initial Arriving Company.
  5.2.4.1.1 The fire department's fire suppression resources shall be deployed to provide for the arrival of an engine company within a **4-minute response time** and/or the initial full alarm assignment within an **8-minute response time** to 90 percent of the incidents as established in Chapter 4.

• 5.2.4.2 Initial Full Alarm Assignment Capability.
  5.2.4.2.1 The fire department shall have the capability to deploy an Initial full alarm assignment within an **8-minute response time to 90 percent** of the incidents as established in Chapter 4.
NFPA 1221/1710 - The BIG Picture

1221 Our Part

1710 Their Part

FIGURE A.5.2.2.2.1 Fire Propagation Curve.
Public Protection Classification

- Assign Rating from 1 to 10
  - 1 - Exemplary Public Protection
  - 10 – Doesn’t Meet Minimum Criteria

- Lower the Rating the Lower the Insurance Premiums – Residential and Commercial

ISOmitigation.com
ISO Public Protection Classification
ISO - Evaluation Process

• **10% - Fire Alarm & Comm. System**
  – Receive and Dispatch “Fire Alarms”
  – Comm. Center and Number of Operators
  – Telephone Service & Number of Lines Coming into the Center
  – Listing of Emergency Number in the Telephone Book
  – Dispatch Circuits & How Notify Fire Dept of the Location of the Emergency
Questions?

PRESENTATION OF THE YUMA EXPERIENCE
Are you meeting the 60 second mark?

How did we get there?

Heather Pyeatt-Morris
9-1-1 Dispatch Supervisor
City of Yuma Public Safety Communications
Who am I?

- 9 years in Public Safety Communications
  - EMD Dispatcher, CTO, Instructor and Supervisor
- Certified APCO EMD Manager and Instructor
- The City of Yuma
  - Largest PSAP in the county
  - Police/Fire/EMS
  - 26 Dispatchers
  - Jan-June 2010
    - 23,000 9-1-1 calls
    - 100,000 non-emergency
    - 45,000 calls for service
Great Expectations

• Is the requirement or benchmark you have set for your call taking process reasonable? How do you know?
  • Standards, Policies & Procedures
  • Training and practice
  • Quality Assurance Quality Improvement
  • Guide card criteria
  • Field vs. Dispatch perspective
  • Technology
How long a minute is, depends on which side of the bathroom door you're on.

Where did this 60 second benchmark come from?
When do you start counting?

- **Primary PSAP**

  - Event
  - Call Initiated
  - Call Rings at PSAP
  - Call Answer
  - Call Processing
  - Call Entry
  - Call Dispatch

  - Call Rings at 2nd
  - Call Answer at 2nd
  - Call Processing
  - Call Entry

  - 60 seconds

- **Secondary PSAP**

  - Event
  - Call Initiated
  - Call Rings at PSAP
  - Call Answered at Primary PSAP
  - Call Transfer
  - Call Rings at 2nd
  - Call Answer
  - Call Processing
  - Call Entry
  - Call Dispatch

  - 45 seconds

  - 60 seconds
Quality assurance, or QA for short, refers to a program for the systematic monitoring and evaluation of the various aspects of a project, service, or facility to ensure that standards of quality are being met.

Quality is determined by the users, customers (callers & responders) and the program sponsor. QA is more than just testing the quality of the program, user, or service, it analyzes the quality to make sure it conforms to specific requirements and with established plans.
Where we were......

Changes in staff, department structure and accreditation goals bring about need for a QA program.

First round of calls reviews begin. Call times are an issue. Average call time 86 seconds.

- Fall 2007: Development of program guidelines, forms and testing.
- January 2008: 4 months of evaluations completed and reviews done with the dispatchers. Improvement of 23 seconds.
- April 2008: 
- Today: 

Not to be duplicated, copied, used, distributed or otherwise altered or displayed without written consent from author.
Let the reviews begin, April – July 2008

<table>
<thead>
<tr>
<th></th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Average</th>
<th>Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Overall Score</td>
<td>82%</td>
<td>87%</td>
<td>86%</td>
<td>90%</td>
<td>88%</td>
<td>6%</td>
</tr>
<tr>
<td>Group Overall Call Processing Time</td>
<td>88secs</td>
<td>69secs</td>
<td>62secs</td>
<td>63secs</td>
<td>65secs</td>
<td>23 seconds</td>
</tr>
<tr>
<td>Total # of calls</td>
<td>648</td>
<td>559</td>
<td>523</td>
<td>549</td>
<td>570</td>
<td></td>
</tr>
<tr>
<td># of calls Reviewed (10%)</td>
<td>65</td>
<td>59</td>
<td>52</td>
<td>55</td>
<td>58</td>
<td></td>
</tr>
</tbody>
</table>
Stats and Results:

• Post review stats:
  – Review date                        Percentage
    • May 2009                     95%
    • July 2009                    94%
    • October 2009                 89%
    • November 2009               92%
    • December 2009               95%
    • January 2010                96%
Today in Yuma....

• **January - June 2010**
  – 5,749 Emergency Fire & EMS calls
    • 0-60secs  73% (average time 51 secs)
    • 61-90secs  20% (average time 73 secs)
    • 91-120 secs  6.7% (average time 111 secs)

  ****based on 1st round exceptions only****

  – Exceptions (Duplicate calls, Mutual Aid, Specialty Assignment Upgrades, Non Emergency Walk-in Refusals, 2nd Assignment #s, Foreign Language, TTY, Public Assists, Test Calls, 3rd party pass downs, difficult callers, unknown locations, wireless, etc...)
### Station Name: 911-2  
### Station Number: 13  
### Department: 0

**Graded by:**  
Ymeath  
**Grade on:** 03/10/09 12:35:41p

**Form used:**  
COY EMD QA

**Call Info**  
Phone Number: Not Reported  
on 12/07/08 at 11:33:56p for: 01:04

### Tab: ALL CALLERS CARD

<table>
<thead>
<tr>
<th>Question Text</th>
<th>Answer</th>
<th>% Tot.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determined location of PT? (Attempted)</td>
<td>Y</td>
<td>9</td>
</tr>
<tr>
<td>Call back number obtained/confirmed? (Attempted)</td>
<td>Y</td>
<td>5</td>
</tr>
<tr>
<td>Did call taker attempt to determine consciousness? (Attempted)</td>
<td>Y</td>
<td>9</td>
</tr>
<tr>
<td>Did call taker attempt to determine breathing? (Attempted)</td>
<td>Y</td>
<td>9</td>
</tr>
<tr>
<td>Was All-Caller Interrogation completed in its entirety at the appropriate time?</td>
<td>Y</td>
<td>5</td>
</tr>
</tbody>
</table>

### Tab: COMMUNICATION SKILLS

<table>
<thead>
<tr>
<th>Question Text</th>
<th>Answer</th>
<th>% Tot.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaks clearly and audibly?</td>
<td>Y</td>
<td>1</td>
</tr>
<tr>
<td>Displays calm, professional manner?</td>
<td>Y</td>
<td>1</td>
</tr>
<tr>
<td>Uses calming techniques when necessary?</td>
<td>Y</td>
<td>1</td>
</tr>
</tbody>
</table>

### Tab: CALLER INTERROGATION

<table>
<thead>
<tr>
<th>Question Text</th>
<th>Answer</th>
<th>% Tot.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used correct APCO EMD Guidedecard?</td>
<td>Y</td>
<td>2</td>
</tr>
<tr>
<td>Were sufficient Vital Points card questions asked?</td>
<td>Y</td>
<td>2</td>
</tr>
</tbody>
</table>

### Tab: PRE-ARRIVAL INSTRUCT

<table>
<thead>
<tr>
<th>Question Text</th>
<th>Answer</th>
<th>% Tot.</th>
</tr>
</thead>
</table>
Call Initiated
Call Rings at PSAP
Call Answer
Call Processing
Call Entry
Call Dispatch

60 seconds

60:00
The Review

• The call taker/EMD should hear themselves

• They should know their time
  – Timers on telephony equipment or in CAD

• The good, the bad and the ugly

*Time is the cruelest teacher; first she gives the test, then teaches the lesson.*
Questions???????

Heather Pyeatt-Morris
City of Yuma Public safety Communications
1500 S. 1st Avenue
Yuma, AZ 85364
PyeattH@YumaAZ.gov
(928) 373-4718

Jim Long
Northwest Fire District
5225 W. Massingale Rd
Tucson ,AZ 85743
jlong@northwestfire.org
(520)887-1010