

## The Challenge of Communication at Hazmat Incidents

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**Key Words:** communication, emergency response, Five-Paragraph Order, HAZMAT incidents, situation, mission, execution, administration, logistics, command, signal, SMEAC

**Abstract:** Many factors and organizational problems tend to exacerbate the intensity of the situation at a response to a HAZMAT incident.

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### Abstract (continued)

By their nature, HAZMAT incidents are typically incidents with multi-hazards that are mitigated by multi-organizational (and possibly multi-jurisdictional) response teams. Therefore, the speed and accuracy of the dissemination and acceptance of mission critical data among the responding elements of an Incident/Unified Command is a paramount concern.

A tool is suggested that should readily improve "passing the word" at HAZMAT incidents. The incorporation of the Five-Paragraph Order (SMEAC) as a standard for HAZMAT response operations orders should significantly increase the safety and effectiveness of the responders.

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## Foreword

☀ James Bond:  
"Do you expect me to talk?"

☀ Auric Goldfinger:  
"No, Mr. Bond. I expect you to die!"

Goldfinger - 1964

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## Situation

- Dark, comfortable room
- Just had lunch
- Anticipation of a long day of lectures ahead
- Who are these guys anyway? And what do they know?
- Identified a communications problem
- Have a simple, no cost tool to dramatically improve communications

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## Mission

- Provide this tool to the Hazmat community
- [Long term] Establish this tool as a standard protocol for emergency responders

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## Execution

- Provide this tool to the ACHMM national conference attendees
  - Paper - CD
  - Presentation – Lecture & slideshow
  - Questions & Answer Period

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## Administration & Logistics

- Conference meeting room: Joliet Room
- Audio/video essentials
- Exits & restrooms
- Refreshments
- Presentation duration 15 minutes

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## Command & Signal

- George Mosho, CHMM
  - Health Physicist, Argonne National Lab
- Marlin Hartman, CHMM
  - Consultant, Hartman & Assoc.
- Steve Graham, CHMM
  - EHSR Manager, Diversified CPC International, Inc.
- Various hand signals – presentation length

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## The Challenge of Communication at Hazmat Incidents



Steve Graham, CHMM  
Marlin Hartman, CHMM  
George Mosho, CHMM

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## Factors Affecting Communications At Hazardous Materials Incidents

- Multi-jurisdictional
- Multi-agency
- Multi-hazard
- Incident Command Structure (ICS)
- Risk perception



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## Information/Data Concerns

- Confidence in the source of the information/data
  - Recognition and familiarity of the source
  - Accuracy of the source
- Dissemination of the information/data
  - Accuracy
  - Speed
  - Complete – provided to all who need to know

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## Things To Know Before A Multi-Agency Response

- Points of Contact (POCs) & other key personnel
- Mission of each agency's team
- Terminology
- Capabilities & limitations
- Equipment

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## Communication: The Key

- Incident & Unified Command structures promote communication
- Prompt dissemination of information is critical to mission success
- Communication impacts strategy and tactics, and subsequently overall risk

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## One Specific Incident

### No Unified Command Established!

- Multi-agency (8) response
  - Private Teams (4)
    - Chemical Companies (3)
    - Trucking Company
  - Government Teams (4)
    - Fire Departments (2)
    - Sheriff's Police
    - County EMA



**Result:** Suspected tank crack becomes a 14 hour response

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## SMEAC

Five-Paragraph Operations Order

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# SMEAC

- ☀ S - Situation
- ☀ M - Mission
- ☀ E - Execution
- ☀ A - Administration & Logistics
- ☀ C - Command & Signal

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# S

- ☀ Situation
  - Information describing the problem; orientation
    - Location
    - Weather
    - Time
    - Agencies responding
    - Product information
    - Etc.

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# SM

- ☀ Mission
  - What you are tasked to accomplish
    - Include any geographical boundaries, time constraints, or other such parameters

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## SME

### ☀ Execution

- How the team plans to perform its mission

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## SMEA

### ☀ Administration & Logistics

- Documentation
- Logistic Officer identified
- "Beans" - Food
- "Bullets" - Equipment
- "Band-Aids" - EMS

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## SMEAC

### ☀ Command & Signal

- Who is in charge & where is he/she?
- ID vests
- Radio frequencies
- Hand and audible signals
- Code words

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# SMEAC

The Five-Paragraph Order

- ☀ S - Situation
- ☀ M - Mission
- ☀ E - Execution
- ☀ A - Administration & Logistics
- ☀ C - Command & Signal

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# SMEAC Exercise

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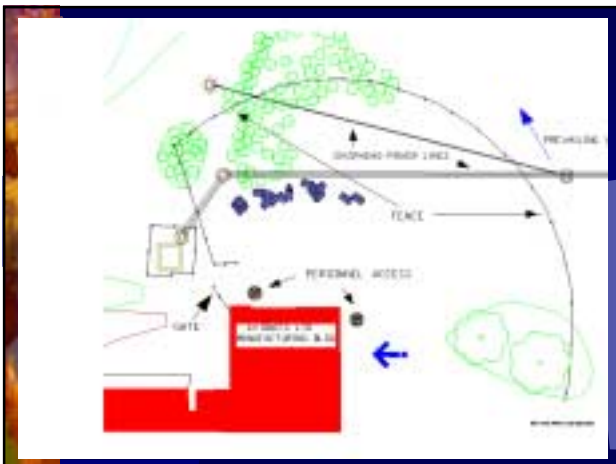
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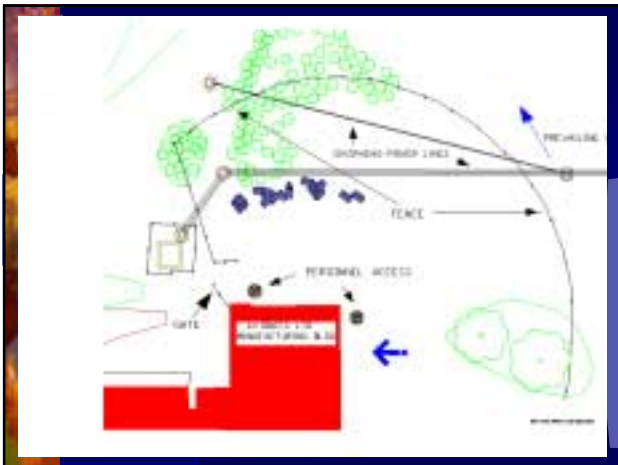
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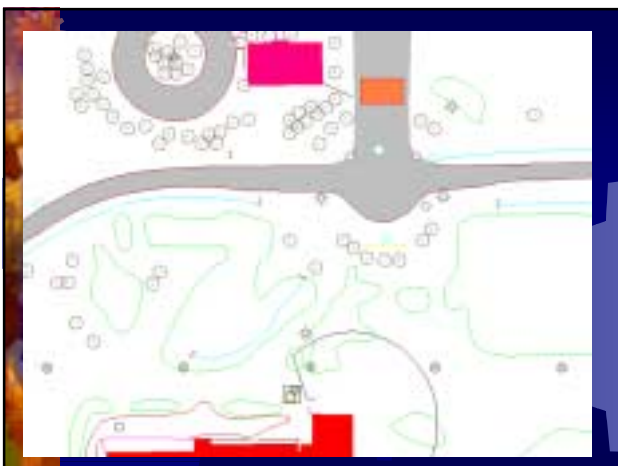
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