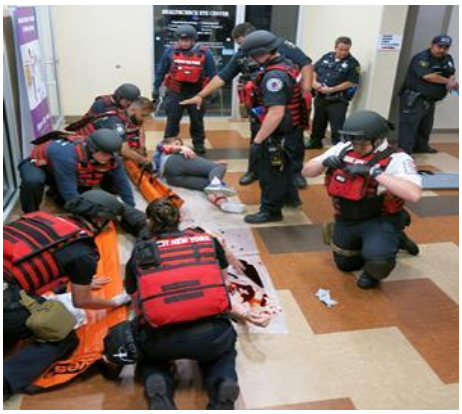
2022 CHIEF OFFICER

ORAL ASSESSMENT

WEBINAR SECTION 2



HAZMAT, COLLAPSE,

MASS CASUALTY-ACTIVE SHOOTER

BC PRATTS

Seminar Objectives:

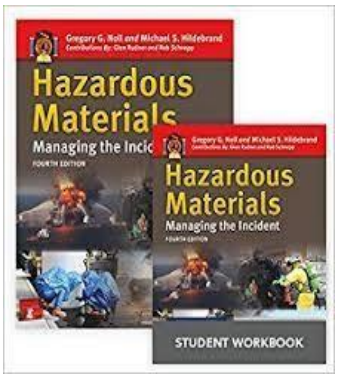
Battalion and Deputy Chief Officer considerations for oral assessment response to:

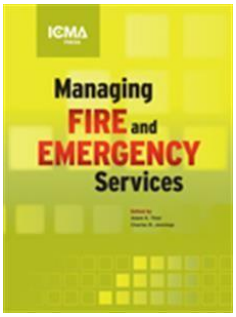
- **Hazardous Materials**
- Site/Facility
- Road/highway
- Railway
- Hardware/pool supply
- Terrorism
- **Collapse**
- Collapse response
- Occurs while on scene
- Terrorism-explosion
- **Mass Casualty**
- Major accidents
- Hostile events
- **Terrorism**

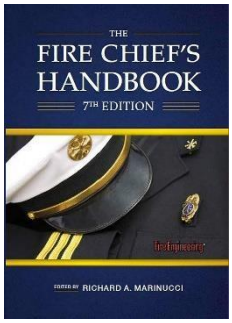
Resources:

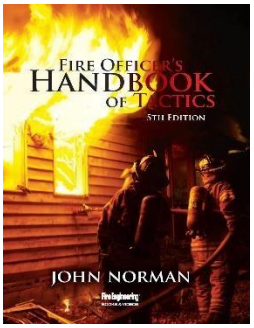
- **Hazardous Materials-Managing the Incident, 4th ed.**
- **8 step process breakdown**
- **Hazmat identifiers**
- **Planning/preparedness/response/recovery**
- **Health and safety concerns**
- **Managing Fire and Emergency Services-ICMA**
- **Hazcom-RTK**
- **Pre-planning**
- **Emergency Management Ch. 2**
- **Emergency Ops Centers/Evacuations, Shelter, & Transportation/Public Warning**

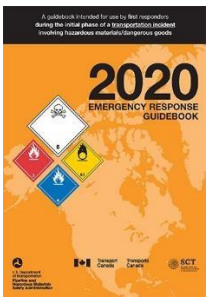
- **Fire Chief's Handbook, 7th Ed.**
- **Ch. 14 Special Operations**
- **Fire Officer's Handbook of Tactics, 5th ed.**
- **Ch. 20 (Oil Burners/gas leaks/explosions**
- **Ch. 23 (Terrorism)**
- **2020 ERG**
- **Promotional Prep-Fire Officer Oral Assessment Guide**
- **Hazmat/Terrorism/Collapse/Mass Casualty**
- **Strategic and Tactical Considerations on the Fireground (Philly students) ✦ Technical Operations Ch.10**

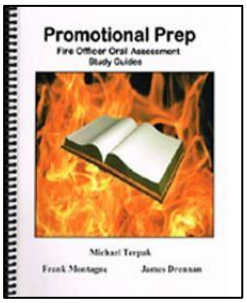


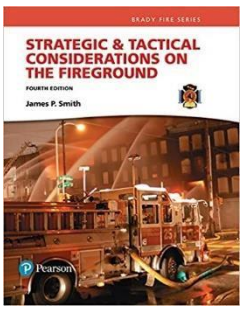












HAZMAT INCIDENTS

- **En-route/Arrival Considerations**
- **Command/Initial Size-up & Radio Report/Resource Request**

Implementing the 8-Step Process:

Student Note: Take a few minutes to write down the 8-step Hazmat Process:

1:_____

2:_____

3:_____

4:_____

5:_____

6:_____

7:_____

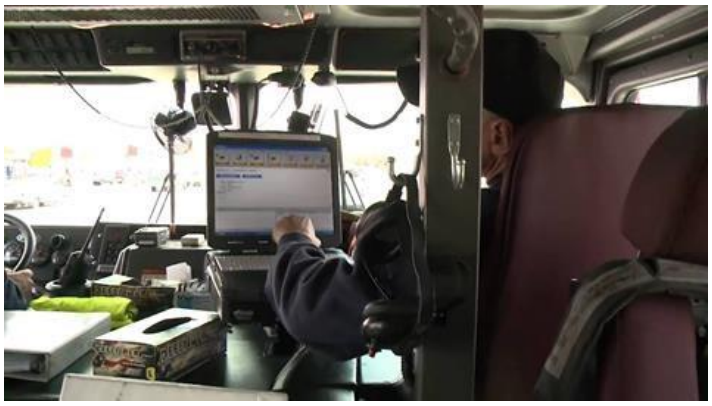
8:_____

Hazmat 8-Step Process…

- Site Management & Control
- Identifying the Problem
- Hazard Assessment & Risk Evaluation
- PPE and Equipment Selection
- Info Management & Resource Coordination
- Implement Response Objectives
- Decontamination ✦ Terminating the Incident

En-Route/Arrival Considerations

- Are you on the scene, or are you responding?
- Are there additional reports from dispatch or first arriving units?
- Are you in your car, or are you walking up to the incident?
- Do you need to reposition (proximity, wind, hills, etc.)?
- Look for clues in narrative…



"You are responding to a reported HAZMAT release at a defunct chemical plant that is currently undergoing an extensive Superfund Cleanup. You arrive before other companies and exit your vehicle as workers approach you and inform you of an explosion of 50 gal drums that were leaking chemicals. <u>As you exit your car, you notice a strange smell in the air…"</u>

*Don't miss the opportunity to correct an issue that needs to be addressed immediately. Getting caught up in following a "script" without critically reading can lead to missing key points! Here, you need to immediately address that you…and the worker(s) are too close to the Hazmat release. You need to immediately move yourself, and the worker(s) to an uphill/upwind position, while notifying incoming companies.

En-Route/Arrival Considerations:

- **Attempt to gather pre-plan information about**
- facility, area terrain, etc.
- **Key Pre-Plan Information:**
- Chemical name if known-cross reference with ERG
- Building's Occupancy and Content
- Emergency Contacts
- Emergency Response Plan
- Occupancy Load-based on current time of day
- Surrounding Exposures
- Surrounding Streets/Highways/Railroads
- Nearby waterways/storm drains
- Hills, trenches, etc.
- **Ask dispatch to have representative meet you at CP or predetermined location according to facilities ERP-*Emergency Response Plan***
- **Monitor FD radio for updates**
- **Approach from uphill, upwind.**
- **Use binoculars from a safe distance for a safe size-up.**
- **Establish a safe approach for responding units.**

- **Gather visual clues (narrative and diagrams)**
- Cloud release…color
- Overcome people, dead animals, dead vegetation
- **Meet with plant manager and keep at CP**

COMMAND:

- **Assume command if Company Officer or BC (DC test) had previous command**
- Face to Face"
- Command Transfer Information Exchange:
- Situation status, deployment of resources, incident needs *ICS FORM 201*
- (CAN report plus resource deployment)
- Assign previous IC to manage a division according to immediate needs
- **Establish Command**
- Name command (address)
- Locate CP in a safe location –UPWIND …UPHILL (Unless product is lighter than air…explain!)...confirm with ERG
- Direct PD & EMS supervisors to the CP
- Prepare for a Unified Command
- **Initial Size-up/Radio Report/Resource request**
- **Brief initial reports, with more detailed reports to follow**
- Building/incident size-up
- CAN report

Resource Request (U2-PERS-WAR-HOG)

- ☐ Utility company
- ☐ 2nd alarm or greater
- ☐ PD for site and traffic control
- ☐ EMS to staging area for firefighter and civilian triage/treatment/transport
- ☐ RIT (s)
- ☐ Safety Officer(s): 1-overall scene, 2nd Hazmat Safety Officer
- ☐ Water Supply Officer
- ☐ Accountability Officer(s)
- ☐ Rehab Officer
- ☐ HAZMAT Team for PPE selection and response objectives
- ☐ OEM/EPA/Health Department/Red Cross
- ☐ Government Agencies
- ☐ DOT/Coast Guard/Sewage Authority
- ☐ *Additional*
- ☐ CHEMTREK
- ☐ Hi-Volume Foam Units
- ☐ State/County EMS Task Force-Mass Casualty
- ☐ Air supply/MSU
- ☐ Notify local hospitals
- ☐ Site representatives

Management & Control- Step 1…

- **Site Establish a staging area uphill/upwind for all responding agencies**
- Assign a staging manager
- Close enough to perimeter
- Large, expandable area
- Access to/from incident

- **Establish initial Hot/Warm/Cold Zones**
- **Establish a Security/Isolation Perimeter to isolate and deny entry**
- Request that PD provides assistance
- Implement public protective actions ✦ Evacuation?
- Protect-in-place?
- Notifications/communications

- Early identification of evacuation routes, transportation, and shelter
- Re-confirm/re-evaluate PPA once Hazmat is identified and confirmed

"As the wind begins to pick up, <u>a large vapor cloud is visible issuing from the facility and moving towards the nearby downwind residential neighborhood…</u>"

*This need to immediately addressed. Do you evacuate, or do you protect in place? The answer would depend on several factors; however, you must make a decision. In "test world" you can do both if you have a well-established plan based on solid incident management along with some help from the text books…

Protect in Place/Evacuation Considerations:

- Rate of escalation of the incident
- Proximity to the incident
- Within 1000 ft (especially with flammable or toxic gasses)
- Current/projected weather
- Number and status of people affected
- Nearby high hazard locations such as schools and hospitals
- Available communications
- Time needed to evacuate
- Available responders

Protect in Place Procedures:

STUDENT NOTE: Take a few minutes to outline Protect-in-Place procedures:

Protect in Place Procedures:

- Through PIO, use reverse 911, media, and social media in multiple languages, hearing and visual impaired for communications
- Close and seal all doors and windows
- Turn off all HVAC, close inlets and fireplace dampers
- Turn off and cover all exhaust fans
- Close as many internal doors as possible
- Pick one room for shelter-master bedroom is best choice if available
- Monitor local radio and warning messages/signals

Evacuation Procedure:

- Through PIO, use reverse 911, media, and social media in multiple languages, hearing and visual impaired for communications
- Establish evacuation priorities
- Downwind, downhill exposures first
- High life hazard occupancies
- Establish evacuation routes
- Work with law enforcement, OEM, and DOT
- Establish transportation
- School busses, public transportation
- Temporary shelter
- Schools, stadiums
- Consider scale of evacuation
- Large- neighborhood/city

- Small –building and exposure

Identify the Problem:

- Building Occupancy
- Pool Supply, refinery, chemical plant, water treatment plant, etc.
- Container Types/Shapes
- Metal/plastic/fiber drums
- Tanker trucks with flat vs rounded ends

"You respond to a train derailment and you observe a tank car with a <u>"Thermos Bottle" design</u> on its side leaking fluid from a broken outlet. The rail conductor notifies you that he is carrying <u>Ethylene</u>. A fire begins as a result from the leak and is now involving the tanker…"

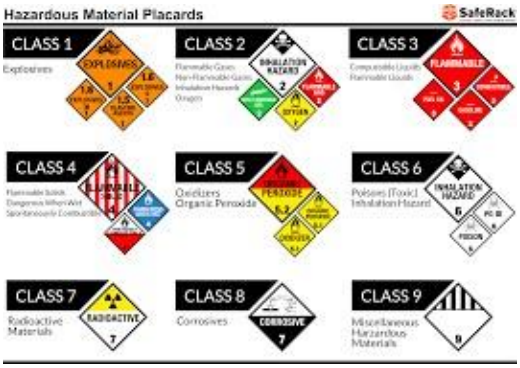
CRYOGENIC LIQUIDS…COOL CONTAINER…DO NOT DIRECT AT SPILL!

- Placards and Labels, Markings
- DOT/Transportation-Distribution Lines

“The tanker derailment damaged an exposed section of a petroleum distribution pipeline. Your operations chief notifies you that the shutoff valve has been located and will isolate the pipeline by closing the valve…”

**Address immediately…stop the unsafe action! Pipelines must not be isolated by fire personnel without the direction of pipeline personnel.*

- Shipping Papers, Facility Documents, SDS Sheets, etc.
- Monitoring and Detection Equipment
- Senses
- Don’t smell or taste!!!



Hazard and Risk Evaluation -Step 3

- Gather Hazard Data through:
- Reference Materials: ERG/DOT/Markings, etc
- Technical Info Centers (CHEMTREC)
- RTK information
- SDS sheets, shipping papers, etc

- HAZMAT data bases
- Info from atmospheric monitoring instruments
- Site emergency response plans
- Site manager information

*Determine the level of risk and appropriate response objectives based on the above

PPE and Equipment Selection -Step 4

- Coordinate with Hazmat leader to ensure that the proper PPE and equipment is requested and used according to risk evaluation
- Ensure all Hazmat members are wearing the proper level of PPE
- Ensure that the proper atmospheric testing devices are being used

Information Management and Resource Coordination-Step 5:

- Ensure that CP and Unified Command is STILL in a safe area
- Re-Evaluate Hot/Warm/Cold/Isolation Zones
- Expand the ICS
- Ensure all notifications have been made
- Activate local Emergency Operations Center (EOC)-*provide updates*
- Ensure that officers are staffed

***STUDENT NOTE: write down key Hazmat ICS/Staff positioned that need to be assigned and what is their role at a Hazmat Incident:**

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Key Hazmat ICS/Staff Positions and Roles:

- Public Information Officer…*inform media and pub*lic
- Victim Tracking Officer…*track victims being transported to hospitals*
- Intelligence Officer…*to work with CHEMTREC and chemical experts*
- Safety Officers…*overall scene safety and Hazmat Safety*
- Liaison Officer…*for interagency coordination and to coordinate with local officials*
- Operations…*Hazmat Group/Fire Control Group/Rescue Group supervisors*
- Logistics…*acquire equipment, food and water*
- Planning…*establish short/mid/long term plans*
- Finance…*secure funding for needed resources*

Implement Response Objectives -Step 6:

- Offensive-containment
- Defensive-confinement
- Non-Intervention –evacuate responders, notify agencies
- Rescue -extricate, remove
- Spill Control –dike, dam
- Fire Control
- Eliminate ignition sources
- De-energize vehicle
- Suppress vapors with foam
- Master streams/unmanned

- Extinguish fire/protect exposures
- Public Protective Actions –notify, protect in place, evacuate, provide transportation and shelter
- Ensure Hazmat and back-up personnel have proper PPE
- Ensure multiple Hazmat monitoring and detection equipment
- Ensure teams have been briefed prior to operations
- Ensure Decon Corridor is established and made known **prior to making entry**
- Ensure Hazmat teams are evaluated by EMS before/after entry
- Ensure Accountability Officer tracks time/duration of entry
- Conduct regular atmospheric monitoring
- Along with Operations/Planning/Intelligence-periodically evaluate, review, and revise plans accordingly
- Ensure strategy objectives are being met and incident is being mitigated
- Periodic reports from staffed divisions and expanded/unified command
- Periodic reports to dispatch and EOC

Decon and Clean-Up-Step 7:

- Ensure Hazmat incident has been stabilized
- Establish a Decon Officer & Group
- Decon area clearly marked
- Technical Decon established in the WARM ZONE
- Rescuers, equipment, & victims that were in the Hot Zone
- Mass Decon for large number of contaminated individuals

- Ensure all exposed members, victims, and other responders have been decontaminated
- Ensure medical evaluations for all members
- Establish a plan to clean-up or dispose of contaminated equipment
- Consult with EPA
- Identify cost recovery and clean-up responsibilities

Transfer/Terminate-Step 8:

- Account for all personnel-PAR
- Ensure all personnel have been rehabbed
- Ensure all personnel and apparatus are ready for duty
- Conduct incident debriefing
- Release mutual aid and demobilize incident
- Identify responsible party/agency to turn the incident over to
- Transfer command to junior officer
- Complete and file after-action reports and post incident analysis-hold critique

HAZMAT SCENARIO:

At 14:30 hours on a windy Monday afternoon, you respond with 2 engine companies and 1 ladder company to a report of a derailed railroad tank car under the Meadowlands Freeway. The derailment took place near the S&A Railroad maintenance office located at 9225 Narrow Rd, while rail workers were attempting to switch tracks. The temperature is 82 degrees and there is a 15 MPH wind blowing to the south and rain is in the forecast.

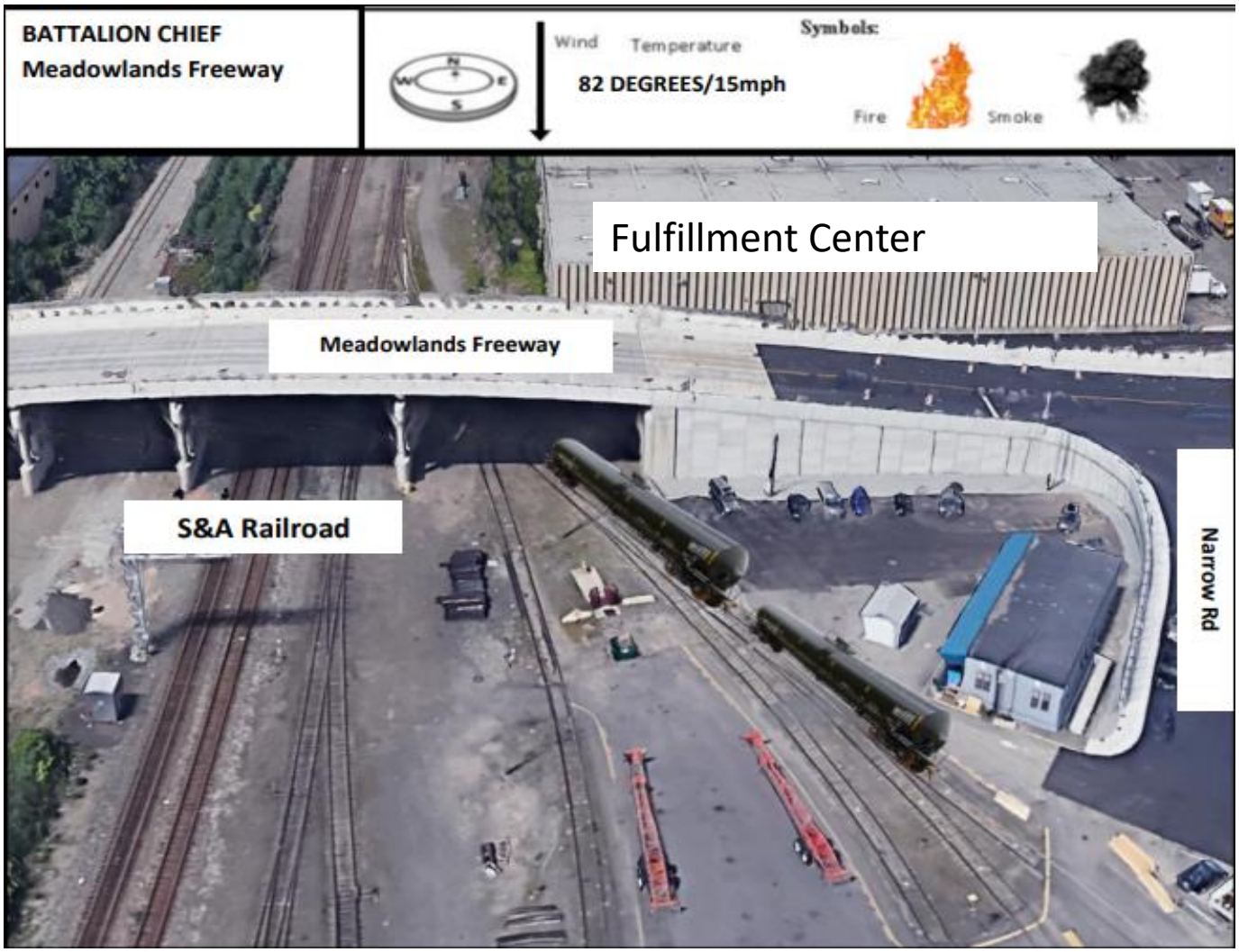
Upon your arrival, you are met by a rail worker who states that there is a crack in one of the tankers and is leaking liquified petroleum gas (LPG). The site supervisor is in the office calling the rail company to shut down service to the area, and other workers are attempting to dam the leak coming from the container.

From your vantage point, you can see that the railroad cars are cylindrical in shape with few markings, and you can make out a placard with the numbers 1075. There is a small vapor cloud and leak coming from one of the tankers. North of the derailment is 9301 Narrow Rd, which is a large 2 story Class-2 merchandise shipping and fulfillment center.

Question: What actions should you take to fully address this incident?

***10-minute prep time**

BATTALION CHIEF
Meadowlands Freeway



ANSWER KEY:

Command:

- Immediately evacuate rail workers, onlookers, and myself to a safe uphill (LPG gas is heavier than air) and upwind position

- Ensure that manager and all office personnel are removed from the office and immediate area
    - Initial isolation area of 330 feet in all directions
    - Large spill evacuation area of 800 meters (1/2 mile)
    - Refer to DOT-ERG for LPG spill
- Account for train conductors
- Assume 9225 Narrow Road Command
- Locate CP in a safe uphill/upwind position-notify dispatch and incoming companies
- Use Binoculars to size up entire area
- Request wind and weather reports from dispatch (rain and wind concerns)
- Prepare for a Unified Command

Size-Up/Radio Report/Resources:

- Initial Incident size-up: Derailed tanker car carrying LPG has derailed and is leaking product. We have no fire, but have a vapor release at this time. Injuries are unknown…

- Resource Request **(U2-PERS-WAR-HOG+)**
- Utility company (shut utilities and eliminate ignition sources)
- 2nd alarm or greater-Stage uphill and upwind
- PD for site and traffic control (ensure traffic to the area is diverted-shut down Meadowlands Freeway)
- EMS to staging area for firefighter and civilian triage/treatment/transport
- RIT (s)
- Safety Officer(s): 1-overall scene, 2nd Hazmat Safety Officer
- Water Supply Officer
- Accountability Officer(s)
- Rehab Officer (warm temperatures)
- HAZMAT Team for PPE selection and response objectives

- OEM/EPA/Health Department/Red Cross
- Government Agencies **(NTSB/DOT/EPA/Sewage Authority)**

Additional Resources:

- Rail line representatives -ensure line service is shut down
- CHEMTREK
- Hi-Volume Foam Units
- State/County EMS Task Force-Mass Casualty
- Air supply/MSU
- Notify local hospitals

- **Form IAP using chemical's information found in ERG and implement 8-Step Hazmat Process ***Explain and expand on the steps…**

- Site Management & Control
  - Evacuate area focusing on downwind and nearby exposures (low lying areas-LPG heavier than air)
  - Fulfillment center (#of employees will require evacuation routes/transportation/shelter)
  - Stabilize and deenergize rail cars and deenergize rail line
  - Ensure rail line is shut down
- ID the Problem
  - Placards, shipping papers, or waybill if documentation is not available (leak, vapor release, threat to public, responders, environment)
- Hazard and Risk Evaluation
  - With assistance of HAZMAT team, air monitoring, ERG, etc
  - Threat to structural integrity of bridge

- PPE Selection
- Information Management and Resource Coordination
    - Unified Command, Command Staff (Command, Finance, Logistics, Operations, Planning, Liaison, Pio
- Implement Response Objectives & Review/Evaluate/Revise Tactical Command Worksheet
    - Dike, dam, divert, suppress vapors, eliminate ignition sources, fire control, evacuate and protect exposures, rescue/triage/treat/transport the injured
- Decontamination
    - Determine responsible party, decon civilians, personnel, equipment, apparatus. Medical evaluations and exposure reports
- Termination
    - Post incident/after action reports, CISD

COLLAPSE OPERATIONS

- En-Route/Arrival
- Command
- Site Management & Control
- Initial Radio Report/Resource Request
- **Collapse Size-Up and Rescue Plan**
- Collapse Size-Up
- Site Survey
- Collapse and Operational Zones
- Scene Safety
- Surface Search/Rescue
- Void Search Rescue
- Selected Debris Removal/Tunneling
- General Debris Removal
- Incident Scene Management
- Review/Evaluate/Revise IAP
- Recovery
- Transfer/Terminate Command

En-Route/Arrival:

- Review pre-plan reports
- Identify items in the survey such as:
- Construction features that may promote secondary collapse
- Occupancy type and fire load
- Surrounding or attached structures
- Nearby railroad that may cause vibrations
- Ask dispatch for projected weather
- As you approach, attempt a multi-sided/360-degree view

Command:

- Assume command if Company Officer or BC (DC test) had previous command
- Face to Face"
- Command Transfer Information Exchange:
- Situation status, deployment of resources, incident needs *ICS FORM 201*
- (CAN report plus resource deployment)
- Assign previous IC to manage a division according to immediate needs
- Establish Command
- Name command (address)
- Locate CP in a safe location –outside of collapse zone
- Direct PD & EMS supervisors to the CP
- Prepare for a Unified Command
    - Establish radio frequencies for command and tactical operation

Site Management & Control:

- Staging area/manager
- Establish a security perimeter/isolation zone
- PD assistance to deny entry to the area
- Remove non-essential personnel
- Implement public protective actions
- Evacuate exposures
- Provide shelter
- Obtain intel from bystanders
- Info on missing people
- Possible cause of collapse

Initial Radio Report/Resource Request:

- Initial Size-up/Radio Report/Resource request
- Brief initial reports, with more detailed reports to follow
- Building/incident size-up
- CAN report
- Resource Request (U2-PERS-WAR-ROVE+)
- Utility company
- 2nd alarm or greater
- PD for site and traffic control
- EMS-MCI to staging area for firefighter and civilian triage/treatment/transport
- RIT (s)
- Safety Officer(s): 1-overall scene, 2nd Collapse

- Water Supply Officer
- Accountability Officer(s)
- Rehab Officer
- **(ROVE):**
- Rescue units and USAR response
- OEM
- Engineers (structural), transit devices, and construction equipment
- Victim Tracking Officer
- Additional
- Air supply/MSU
- Light unit-extended operations
- Red Cross
- Notify local hospitals
- Hazmat team (scenario dependent)
- Drone Operators

Collapse Rescue Plan-*Size-Up:*

- Construction type and features that can cause primary/secondary collapse
- Occupancy
- Collapse size/extent of collapse
- Cause of collapse
- Confirm how many people are unaccounted for
- Are firefighters involved in collapse? PAR
- Exposure issues
- Collapse type-pancake/lean-to/unsupported/V-Type/inward-outward/90 degree
- Risk analysis (rescue or recovery)
- Fire concerns
- Water issues

Collapse Rescue Plan-O*perations:*

- Site Survey
- Establish Operational Zones
- Site Safety
- Surface Victim Search and Rescue
- Void Space Search and Rescue
- Selected Debris Removal and Tunneling

Site Survey:

- Building pre-plans and blueprints
- Google Earth images (shows structure/are prior to collapse)
- View from aerial devices or taller buildings
- Drone operators
- Reports from division officers
- Diagrams of underground utilities

Operational Zones:

- Collapse zone-consider secondary collapse
- 50ft Exclusion Zone for specially trained personnel
- 100ft Operational Zone for support personnel ✦ Limit vibrations around operational zone
- Media/bystanders outside of operational zone

Site Safety:

STUDENT NOTE: Take a few minutes to write down site safety considerations for structural collapse incidents:

Site Safety:

- PPE/Respirators/N95 masks for dust and particulates
- Utilities controlled
- Stretch protective hoselines
- Shore unstable areas
- Constant air monitoring
- Multiple survey devices to detect movement
- Eliminate vibrations
- Pump out accumulated water
- Increase supervision – division officers assigned
- Increased lighting
- Frequent PARS/rehab/relief
- Establish LCES-Lookout/Communications/Escape Routes/Safety Zones
- Review/Evaluate/Revise IAP
- EMS medical evaluations for rescuers
- Decon for all members

Surface Search:

- Rescue visible victims on rubble
- Ensure stability by cribbing and shoring
- Use ropes and webbing for rescuers
- Position aerial platform to assist with locating victims
- Use TIC
- Use small teams to limit personnel on pile
- Have back-up team for RIT Ops
- Position personnel and safety officer to observe for hazards as rescuers search
- PAR/Decon/Rehab when complete

Void Search:

STUDENT NOTE: Take a few minutes to write down steps/considerations for Void Searches:

Void Search:

- Search dogs
- Acoustic devices
- Search cameras
- TIC
- Pump out standing water
- Shore up unstable areas
- Ropes for members searching
- Periodic radio reports on progress
- Air monitoring devices
- Rescue located victims
- Mark areas where victims have been found
- PAR/Decon/Rehab when complete

Selected Debris Removal-Tunneling:

- Conduct an “Operational Time Out”
- Utilize fresh personnel
- Shoring unstable areas
- Breaching tools for tunneling
- Consider multiple approaches
- Monitor transit devices
- Air monitoring
- Remove debris by hand-chain
- All survivable victims located and removed before proceeding
- Utilize search dogs
- PAR/Decon/Rehab when complete

General Debris Removal:

- Utilize heavy construction equipment
- Dump pile is monitored for as debris is removed for victims
- Use cadaver dogs
- Use a construction site mister to suppress dust
- Have medical examiner on site
- Treat remains with respect

Transfer/Terminate Command:

- Provide CISD for members
- Medical evaluations before going back in service
- Exposure reports filled out
- Decon for all personnel and equipment
- Demobilize mutual aid/outside agencies
- Cordon off area and request PD to maintain site security
- Transfer command to junior officer-DC
- Turn property over to responsible party-building department, etc
- Place companies back in service
- Photos and diagrams
- Conduct Post Incident Analysis
- Document incident-NFIRS/after action reports from officers

COLLAPE SCENARIO:

You are Battalion 4 and are responding to a reported gas leak at 223 Smith Street. 223 Smith St is a 2-story wood frame residential row-frame dwelling with 2 apartments on each floor. It is attached to similarly constructed buildings on the B and D sides. Prior to the fire department's arrival, dispatch notifies you that occupants of the exposures are reporting a large explosion involving 223 Smith St.

As you arrive, you notice that there has been a collapse of the A side exterior wall onto the street, and leaning floors between the first and second floors. There is debris on the street, and a strong odor of gas is present. The time is 0900 on a warm September morning with no wind.

Question 1:

What immediate steps do you take to initially gain control of this incident?

Question 2:

How do you direct your rescue team leader to conduct search operations for missing/trapped occupants?

10 min prep period

Student Notes:

ANSWER KEY:

- **Provide Initial Size-up/Initial radio report/resource request**
- **Radio Report/Resource request**
- **Brief initial reports, with more detailed reports to follow (scenario specific)**
  - Building/incident size-up
  - CAN report
- **Resource Request (U2-PERS-WAR-ROVE+)**
  - Utility company
  - 2nd alarm or greater (assign staging)
  - PD for site and traffic control
  - EMS-MCI to staging area for firefighter and civilian triage/treatment/transport
  - RIT (s)
  - Safety Officer(s): 1-overall scene, 2nd Collapse
- **(WAR)**
  - Water Supply Officer
  - Accountability Officer(s)
  - Rehab Officer
- **(ROVE+):**
  - Rescue units and USAR response
  - OEM
  - Victim Tracking Officer
  - Engineers (structural), transit devices, and construction equipment
  - + Additional
    - Air supply/MSU
    - Light unit-extended operations
    - Red Cross
    - Notify local hospitals
    - Hazmat team (scenario dependent)

Conduct a Collapse Rescue Plan Size-Up

- Construction type and features that can cause primary/secondary collapse
- Occupancy
- Collapse size/extent of collapse
- Cause of collapse
- Confirm how many people are unaccounted for
- Are firefighters involved in collapse? PAR
- Exposure issues
- Collapse type-pancake/lean-to/unsupported/V-Type/inward-outward/90 degree
- Risk analysis (rescue or recovery)
- Fire concerns
- Utility issues (gas/water & water supply/electric)

Conduct a Site Survey

- Building pre-plans and blueprints
- Google Earth images (shows structure/are prior to collapse)
- View from aerial devices or taller buildings
- Drone operators
- Reports from division officers
- Diagrams of underground utilities

Conduct Site Safety Measures

- Collapse zone-consider secondary collapse
- 50ft Exclusion Zone for specially trained personnel
- 100ft Operational Zone for support personnel
- Limit vibrations around operational zone
- Media/bystanders outside of operational zone
- PPE/Respirators/N95 masks for dust and particulates
- Utilities controlled
- Stretch protective hoselines
- Set up aerial master streams
- Shore unstable areas
- Constant air monitoring
- Multiple survey devices to detect movement
- Eliminate vibrations
- Pump out accumulated water

- Increase supervision – division officers assigned B/C/D
    - Collapse Rescue Group Leader
    - Fire Suppression Group Leader
    - Public Information Officer*…inform media and pub*lic
    - Victim Tracking Officer…*track victims being transported to hospitals*
    - Intelligence Officer…*to work with PD, video cameras showing area before collapse/explosion*
    - Safety Officers…*overall scene safety and collapse rescue ops*
    - Liaison Officer…*for interagency coordination and to coordinate with local officials*
    - Operations…*manage Fire Control Group/Rescue Group supervisors*
    - Logistics…*acquire equipment, food and water*
    - Planning…*establish short/mid/long term plans*
    - Finance…*secure funding for needed resources*
- Increased lighting
- Frequent PARS/rehab/relief
- Establish LCES-Lookout/Communications/Escape Routes/Safety Zones
- Review/Evaluate/Revise IAP
- EMS medical evaluations for rescuers
- Decon for all members

Question 2: "How do you direct your rescue team leader to conduct search operations for missing/trapped occupants?"

Conduct Victim Surface Search Ops:

- Rescue visible victims on rubble
- Ensure stability by cribbing and shoring
- Use ropes and webbing for rescuers
- Position aerial platform to assist with locating victims
- Use TIC
- Use small teams to limit personnel on pile
- Have back-up team for RIT Ops
- Position personnel and safety officer to observe for hazards as rescuers search
- PAR/Decon/Rehab when complete

Conduct Victim Void Search

- Search dogs
- Acoustic devices
- Search cameras
- TIC
- Pump out standing water

- Shore up unstable areas
- Ropes for members searching
- Periodic radio reports on progress
- Air monitoring devices
- Fresh air ventilation
- Rescue located victims
- Mark areas where victims have been found
- PAR/Decon/Rehab when complete

Conduct Selected Debris Removal & Tunneling

Operational "time-out" before proceeding…review/evaluate/revise then…

- Utilize fresh personnel
- Shoring unstable areas
- Breaching tools for tunneling
- Consider multiple approaches
- Monitor transit devices
- Air monitoring/fresh air ventilation
- Remove debris by hand (chain)
- All survivable victims located and removed before proceeding
- Utilize search dogs
- PAR/Decon/Rehab when complete

Conduct General Debris Removal

- Utilize heavy construction equipment
- Dump pile is monitored for as debris is removed for victims
- Use cadaver dogs
- Use a construction site mister to suppress dust
- Have medical examiner on site
- Treat remains with respect

Terminate Command

- Provide CISD for members
- Medical evaluations before going back in service
- Exposure reports filled out
- Decon for all personnel and equipment
- Demobilize mutual aid/outside agencies
- Cordon off area and request PD to maintain site security
- Transfer command to junior officer-DC
- Turn property over to responsible party-building department, etc
- Place companies back in service
- Photos and diagrams
- Conduct Post Incident Analysis
- Document incident-NFIRS/after action reports from officers

Mass Casualty/Active Shooter

En-Route/Arrival:

- Review pre-plan information
- Request current wind speed and direction (terrorism/Hazmat/explosions)
- Request projected weather (all MCIs…Why???)
- Identify safe avenue of approach
- Uphill and upwind-terrorism/explosion
- Keep access and egress routes open
- Multi-sided-360-degree view of incident
- Use binoculars if terrorism/Hazmat suspected

Establish/Assume Command:

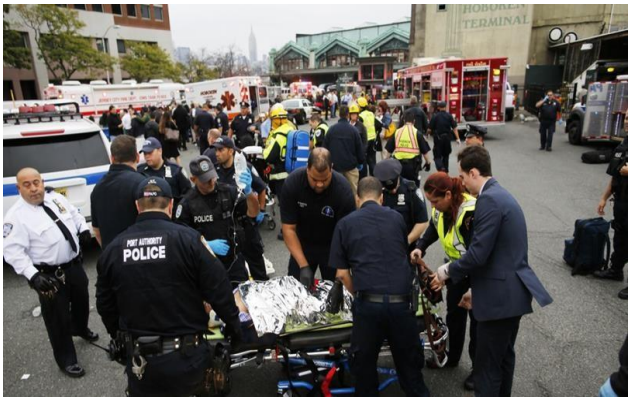
- Face-to-face transfer with junior officer

- Establish UNIFIED command
- Law enforcement
- EMS
- Announce location of CP
- Location with advantageous view
- Uphill & upwind-*terrorism*

- Designate a staging area and staging manager
- Consider a unified staging area
- Ensure staging is in a safe area (uphill/upwind)
- Identify command and tactical radio channels
- Establish operational zones if Hazmat is suspected

Possible Incidents & Concerns

- Commuter train derailment
- Airplane crash
- Highway multiple vehicle accident
- Structural collapse
- Explosion-accidental
- Explosion-terroristic
- Mass Killing-Hostile Threat Incident
- Active shooter
- Vehicle driven through outdoor venue
- Stabbing
- Number of injured
- Risk(s) to responders
- Triage, treatment, and transportation needs
- Environmental impact



Initial Radio Report/Resource Request:

- Brief initial reports, with more detailed reports to follow
- Building/incident size-up
- CAN report
- Declare an MCI-early notification
- Resource Request (U2-PERS-WAR)
- Utility company
- 2nd alarm or greater
- PD for site and traffic control- ***ATF/FBI for terrorism***

- **EMS TASK FORCE –MCI to staging area for firefighter and civilian triage/treatment/transport**
- RIT (s)
- Safety Officer(s): 1-overall scene, 2nd Hazmat Safety Officer
- Water Supply Officer
- Accountability Officer(s)
- Rehab Officer *Additional:*
- OEM
- DOT
- FAA
- Hazmat Unit
- State/County EMS Task Force-Mass Casualty
- Air supply/MSU
- Notify local hospitals
- Medivac
- Site representatives

Identify Strategy and Tactics:

- Remove all non-essential personnel/deny entry into area
- Ensure personnel are working within established operational zones
- Conduct air monitoring-if chemical/terrorism
- Assign fire suppression group for fire control
- Public protective actions (evacuate/protect-in-place)
- Work with EMS to field-triage victims
- Green Tags: walking wounded-non-life-threatening injuries
- Yellow Tags: non-life-threatening injuries; require assistance
- Red Tags: major life-threatening injuries
- Black Tags: dead/non-savable
- Treat and transport injured to trauma centers/hospitals
- Decon members for BBP
- Conduct frequent PARS

Implement IMS:

- Unified Command
- Safety Officers
- Victim Tracking Officer
- Liason Officer
- Public Information Officer
- Intelligence Officer
- Operations with Division/Group assignments
- EMS Branch
- Planning Section
- Logistics Section
- Finance Section

Review/Evaluate/Revise IAP:

- Meet with Division Officers and Unified Command to discuss progress
- Ensure all savable victims have been rescued
- Ensure that the scene is still safe

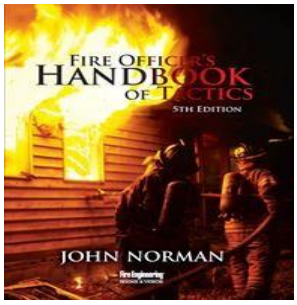
Place Incident Under Control:

- Ensure that secondary searches for victims are negative
- Ensure that all members and equipment are deconned
- Ensure all members have been rehabbed and medical evaluations conducted
- Ensure that evidence is undisturbed and preserved for investigations
- Demobilize mutual aid/outside agencies
- Cordon off area and request PD to maintain site security
- Transfer command to junior officer-DC
- Ensure CISD for all members
- Place companies back in service
- Photos and diagrams

- Conduct Post Incident Analysis
- Document incident-NFIRS/after action reports from officers

ACTIVE SHOOTER

- New mention in Norman's 5th Ed, in addition to *FIRE AS A WEAPON*
- Fire personnel have been caught in ambush style attacks
- Has been a growing trend in the US
- Fire Departments now play a critical role
- Approach these incidents similar to Mass Casualty and Hazmat (terrorism)



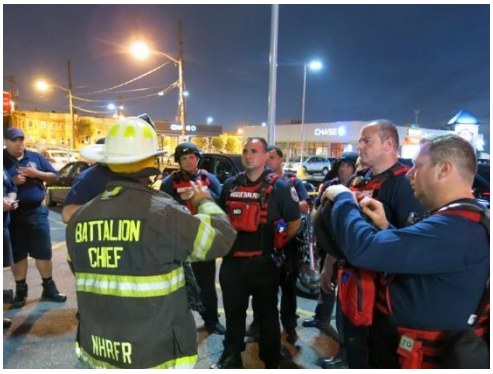
En-Route/Arrival:

- Obtain critical information while responding
- Pre-plan information
- Number and location of shooter(s)
- Location of law enforcement supervisor
- Location of law enforcement command post
- Identify preliminary staging area
- Incoming companies must stay away from building until LE perimeter is established
- Staging should be out of line of sight of any part of the building containing the shooter
- Co-locate with LE incident commander and Establish a Unified/Joint Command (Norman)
- Locate CP in a safe area
- Maintain situational awareness

Command:

- If LE has not located a CP, locate in a safe area, notify LE and EMS of its location
- If a junior fire officer has already established command, transfer face-to-face and assume command
- Establish a Unified/Joint CP
- Identify command and tactical radio channels ✦ Under the direction of law enforcement:
- Establish operational zones (Hot/Warm/Cold)
- Establish isolation zone to limit/deny entry

Initial Radio Report/Resource Request:



- **Brief initial reports, with more detailed reports to follow**
- Building/incident size-up
- CAN report
- **Declare an MCI-early notification**
- **Resource Request (R2-PERS-WAR)**
- **Rescue Task Force**
- 2nd alarm or greater
- PD for site and traffic control- ***ATF/FBI /SWAT***
- **EMS TASK FORCE –MCI to staging area for firefighter and civilian triage/treatment/transport**
- RIT (s)
- Safety Officer(s): 1-overall scene, 2nd RTF Operations

- Water Supply Officer (**in the event that fire is used as a weapon**)
- Accountability Officer(s)
- Rehab Officer
- Additional
- Fire suppression group on standby-
- **Master streams, unmanned, reach and penetration, FDC**
- Decon group for BBP
- State/County EMS Task Force-Mass Casualty
- Notify local hospitals
- Medivac
- Site representatives

Operational Zones:

HOT ZONE

- Suspect(s) present or engaged by LE
- Potential presence of an IED
- **Only LE operates within this zone**

WARM ZONE

- Cleared by initial LE units

- Potential for incident escalation
- Ballistic gear suggested
- **LE escorted Rescue Task Force**
- Casualty collection points (CCP)
- **SAFETY CORDON:**
- Warm Zone designation
- Law enforcement secures and maintains a safe passage for the Rescue Task Force to travel
- Established between cold and warm zones, and between Casualty Collection Points and/or Ambulance Exchange Points

COLD ZONE:

- No suspect(s) or devices
- No ballistic gear or LE escort needed
- Ambulance Exchange Points (AEP)
- **CP, Staging, Resources, Rehab, etc**

Identify Strategy and Tactics:

- Remove all non-essential personnel/deny entry into area
- Ensure personnel are working within established operational zones
  - Ensure proper PPE and FD/EMS personnel clearly identified
  - Work with EMS to field-triage victims
  - Green Tags: walking wounded-non-life-threatening injuries
  - Yellow Tags: non-life-threatening injuries; require assistance
  - Red Tags: major life-threatening injuries
  - Black Tags: dead/non-savable
  - Treat and transport injured to trauma centers/hospitals
  - Hemorrhage & Airway Control and Rapid Extrication!!!
  - Establish Decon for BBP
  - Conduct frequent PARS
  - Assign fire suppression group for fire control-*if fire is used as a weapon*

Implement IMS:

- Unified Command
- Safety Officers
- Victim Tracking Officer
- Liason Officer

- Public Information Officer
- Intelligence Officer
- Operations with Division/Group assignments
- EMS Branch
- Planning Section
- Logistics Section
- Finance Section

- **Review/Evaluate/Revise IAP:**
- Meet with Division Officers and Unified Command to discuss progress
- Ensure all savable victims have been rescued
- Ensure that the scene is still safe
- **Place Incident Under Control:**
- Ensure that secondary searches for victims are negative
- Ensure that all members and equipment are deconned
- Ensure all members have been rehabbed and medical evaluations conducted
- Ensure that evidence is undisturbed and preserved for investigations
- Demobilize mutual aid/outside agencies
- Cordon off area and request PD to maintain site security
- Transfer command to junior officer-DC
- Ensure CISD for all members
- Place companies back in service
- Photos and diagrams-PIA-Document-NFIRS-After Action

Active Shooter-MCI:

You are on duty during the first week of November and temperatures are unseasonably mild. There has been a contentious election year and there have been somewhat peaceful protests in the city. The local schools are being used as polling stations and the students and teachers have the day off.

You are the chief officer in the busiest section of the city but the entire city has been eerily quiet. At 1800hrs you are dispatched to a reported pull station activation at the local high school. As you respond, dispatch "fills out" the assignment for a full response due to calls of a reported smoke condition.

As you arrive first on the scene, you observe a light haze coming from the auditorium doors and hear loud bangs and panicked voters. People are covered in blood, and are running out of the school. A police Sergeant on the scene informs you that his officers inside are reporting shots fired and that the smoke is actually tear gas used by the shooter. He also reports that the shooter has been taken into custody, but there are multiple shot victims in the auditorium where the voting was taking place. He then goes inside to assist the officers and informs you that his superior officer is on his way.

- **Question: What actions should you take to address this incident?**

***10 minute prep time**

2

ANSWER KEY:

1. En-route/Arrival:

Review any pre-incident or tactical survey information specific to address/occupancy in the exercise - *IF it is a building collapse.*

- Notify dispatch to advise incoming companies to stage at the nearest cross street, out of line of sight of the building
- Notify dispatch to have incoming police Lieutenant meet me at safe area
- Seek cover
- Co-locate with LE incident commander, request EMS supervisor and prepare for a Unified/Joint Command (Norman)
- Incoming companies must stay away from building until LE perimeter is established
- Request the current wind speed and direction from the Fire Dispatch Center - *IF it is a terrorist or hazardous material incident.*
- Also request the projected weather *for ALL types of MCI's.*
- Identify and announce a safe approach path for all responding emergency resources *for ALL types of MCI's.*
- Keep access and egress routes open for critical *(specific*) emergency response units.

2. Establish/Assume Command:

- Establish UNIFIED Command FD/PD/EMS
- Identify Command and Tactical radio frequencies for the incident.

3. Initial Radio Report/Resource requests

Request additional resources for the incident.
To assist with your resource requests, consider use of a resource acronym as a potential guide. We use **R2 PERS WAR *.**

- **Rescue Task Force**
- **2**nd Alarm or greater to a designated Staging Area.
- **P**olice for traffic and crowd control. **+ ATF/FBI/JTTF**
- **E**mergency Medical Service for triage, treatment and transportation of the injured.
- **R**apid Intervention Company(s) for firefighter safety.
- **S**afety Officer for scene safety.
- **W**ater Supply Officer for large fire potential or remote area operations.
- **A**ccountability Officer.
- **R**ehabilitation Officer.
- **Other:** Incident specific needs.
  - *OEM*
  - *Notify area hospitals*
  - *Have Hospital representatives at the CP*
  - *Mass Casualty Units*
  - *Hazardous Material Units* ***(gas dispersed)***
  - *Notify FAA to clear air traffic to accommodate for Air/Helicopter Ambulances.*

4. Scene Size-Up:

- Hostile event
- Hazardous Materials (gas)
- WMD (air monitoring needed)
- Fire can be used as a weapon
- Number of injured
- Risk(s) to first responders (still hostile event, BBP)
- Triage, treatment and transportation needs
- Local hospital capabilities

5. Identify the Strategy and Tactics for the Incident:

- Site Management and Control:
- Remove all non-essential personnel
- Establish a Staging Area uphill and upwind for all responding resources.
- Establish a security perimeter by isolating and denying entry to the area/building. Give significant consideration in using the Police to assist you with this responsibility.
- Conduct air monitoring.
- Establish Control Zones for the incident site: Hot, Warm and Cold.
- Implement public protective actions by evacuating, protecting in place, or implementing a combination of the two.
- Establish Triage, Treatment and Transportation areas.
- Coordinate with LE & EMS to rescue victims
- Treat/Triage/Transport
- Hemorrhage and airway control
- Rapid extrication
- Assign a rescue group leader

6. Incident Management System:

- Unified Command
- Safety officer(s)
- Liaison officer – *to coordinate assisting and co-operating agencies.*
- Information officer –*to inform the media and public*.
- Intelligence officer
- Operations with Division/Group task assignments
- EMS Branch with Triage, Treatment and Transportation Groups
- Planning Section
- Logistics Section
- Finance Section

PARS – Once units are assigned, have Branch, Division, and Group Supervisors conduct periodic Personnel Accountability Roll calls of your people.

7. Review, Evaluate and Revise your Incident Action Plan:

- Review, evaluate and revise your action plan based on visual and progress report information received throughout the incident.

8. Place the Incident/Exercise Under Control:

- Ensure that all Secondary searches are complete and negative.
- Ensure that all Salvage and Overhaul responsibilities are being met.
- Rotation and rehabilitation of members.

- Preserve the scene/evidence for investigation.
- Begin to demobilize the incident scene.
- Secure the Incident scene.

9. Terminate/Transfer:

- Transfer the Incident to Junior Officer
- Conduct a post incident analysis.
- Critical Incident Stress Debriefing Team.
- Decon PPE/ equipment/ apparatus and members.
- Medical exams and exposure reports for members
- Ensure that all responsibilities with documentation and report writing are met.