

Springfield Greene County Office of Emergency  
Management

HAZMAT/Terrorism Tabletop Exercise

After Action Report



**AFTER ACTION REPORT**  
Hazmat/Terrorism Tabletop Exercise

**Table of Contents**

<b>Chapter 1:</b>	Overview
<b>Chapter 2:</b>	Exercise Goals and Objectives
<b>Chapter 3:</b>	Exercise Events Synopsis
<b>Chapter 4:</b>	Analysis of Mission Outcomes
<b>Chapter 5:</b>	Analysis of Critical Task Performance
<b>Conclusions:</b>	
<b>Executive Summary:</b>	

**AFTER ACTION REPORT**  
Hazmat/Terrorism Tabletop Exercise

**Table of Contents**

<b>Chapter 1:</b>	Overview
<b>Chapter 2:</b>	Exercise Goals and Objectives
<b>Chapter 3:</b>	Exercise Events Synopsis
<b>Chapter 4:</b>	Analysis of Mission Outcomes
<b>Chapter 5:</b>	Analysis of Critical Task Performance
<b>Conclusions:</b>	
<b>Executive Summary:</b>	

## **After Action Report**

### HAZMAT/Terrorism Tabletop Exercise

#### Executive Summary:

Homeland security preparedness involves a cycle of outreach, planning, capability development, training, exercising, evaluation, and improvement. Successful exercises lead to an ongoing program of process improvements. This After-Action Report (AAR) is intended to assist agencies striving for preparedness excellence by analyzing exercise discussion and achieving the following:

- Identifying strengths to be maintained and build upon
- Identifying potential areas for further improvement
- Recommending exercise follow up actions

The recommendations in the AAR should be viewed as suggestions only. In some cases, agencies may determine that the benefits of implementation are insufficient to outweigh the costs. In other cases, agencies may identify alternative solutions that are more effective. Each agency should review the recommendations and determine the most appropriate action and time needed for implementation.

The Springfield Greene County HAZMAT/Terrorism Tabletop Exercise was conducted on March 30, 2006, in Greene County Missouri. The scenario involved the detonation of an explosive device with the release of Air Cargo Mixed Freight. This Tabletop Exercise allowed the participating agencies to determine how effectively the Standard Operating Guidelines (SOG) and the Emergency Operations Plans (EOP) address response issues when applied to the consequences of a terrorist attack.

#### Strengths:

Key strengths identified during this exercise included the following:

- All participants were willing to help each other overcome the challenge posed by the threat.
- Fire Department immediately set up ICS and made Incident Scene Reports
- Fire Department made Health Hazard Assessments
- Decontamination was done on site
- Emergency Communications 911 followed call down list to activate EMS, EOC, and Fire and mutual aid departments
- Two triage and treatment sites were established due to the large area involved
- EOC was activated and operational
- Unified Command activated
- Effective communications between MSU Security staff, Fire, and Law enforcement departments

- Increased knowledge between MSU and responders about off site generator locations and valuable information about the campus and occupants.
- Treatment and Transportation conducted
- Law Enforcement assisted in scene assessment
- Law enforcement initiated early site control points.

Area's for Improvement:

Throughout the exercise, a few opportunities for improvement in the community's ability to respond to a Terrorist Bomb incident were identified.

Recommendations include the following:

- The identification of a probable HAZMAT component earlier in the incident.
- The Fire department, EMS, and Law Enforcement should work together to improve communication and training with the MSU staff.
- MSU should research a solution for on site and off site EOC communications ability function independently.
- Address the need to rotate and rest responders when dealing with a huge incident probably over several days.

Keeping with the no-fault nature of this exercise, the evaluation embodied in the AAR examines the plans, procedures, and response system used over the course of the exercise. As an evaluated practice, individual and team performances were taped and documented to make recommendations for future improvements. Observations were focused primarily on overall response actions and the interaction among all agencies rather than on individual participants.

## **After Action Report**

### HAZMAT/Terrorism Tabletop Exercise

Chapter 1: Overview.

Exercise Name:

MSU Air Crash Tabletop Exercise

Duration:

2 ½ hours

Exercise Date:

March 30, 2006

Sponsor:

Springfield Greene County Office of Emergency Management

Type of Exercise:

Tabletop

Funding Source: (Agency Receiving Funding)

Springfield Greene County LEPC and Office of Emergency Management.

Program:

Homeland Security Exercise and Evaluation Program, State 03 Funding  
LEPC Funding

Focus:

Response

Classification:

For Official Use Only

Scenario:

Chemical release or threat (C)

Explosive detonation or threat (E)

Location:

MSU Campus Glass Hall, Springfield MO.

Participants:

Local Agencies:

Springfield Emergency Communications 911

Springfield Fire Department

Springfield Police Department  
Greene County Sheriff Department  
MSU University Safety and Transportation Department  
ARES  
Cox Health Care EMS  
St. John's EMS  
Cox Hospital  
St. John's Hospital  
Springfield Greene County Office of Emergency Management  
American Red Cross  
Salvation Army  
Springfield Greene County Medical Examiners Office  
Springfield City Utilities  
Springfield Branson National Airport  
MO Wing Civil Air Patrol  
Willard Fire Department

Federal Agency:  
Transportation Security Administration (TSA)

State Agency:  
None

International Agency:  
None

Number of Participants: 26  
Controller: 1  
Evaluators: 1

#### Exercise Overview:

The Air Crash tabletop exercise was designed as a 2 hour exercise that tested the capabilities of local responders to coordinate a large area and high casualty HAZMAT/Terrorist incident. To work effectively with MSU Security staff in responding to, communicating and managing such an incident.

#### Exercise Evaluation

The exercise was designed to provide participants an opportunity to assess their decision making abilities. To assess decisions to perform the critical tasks required to respond to a large area with dense population involvement in a HAZMAT/Terrorist Incident.

The tabletop exercise was video taped and observed an evaluator. The Hot Wash was done in discussion form after the tabletop was concluded, opinions and observations were captured.

An Improvement Plan meeting will be scheduled to determine lessons learned, make recommendations for improvement actions, and identify key areas of emphasis for future planning.

## After Action Report HAZMAT/Terrorism Tabletop Exercise

### Chapter 2: Exercise Goals and Objectives

Most exercise goals established by the Air Crash Tabletop Exercise Planning Team were met during exercise play. Through demonstration of the objectives, exercise participant's successfully simulated an effective response to scenario events. At the same time, exercise play revealed ways that future responses could be made more effective. The following design objectives were used in the exercise:

#### Emergency Communications:

1. Demonstrate immediate notification of responder agencies.
2. Complete the notifications required in the call down list as outlined in the Springfield Greene County EOP.

#### EMS:

1. Demonstrate ability to triage, treat, and transport patients.
2. Demonstrate the ability to conduct rapid situational assessments.
3. Demonstrate the participation in ICS.

#### FIRE:

1. Demonstrate the ability to conduct rapid situational assessments.
2. Demonstrate initiation and activation of ICS.
3. Demonstrate decontamination of people on site.
4. Demonstrate the ability to identify triage locations.

#### Law Enforcement & MSU Safety:

1. Demonstrate the ability to conduct rapid situational assessments
2. Demonstrate the ability to communicate on site information between agencies.
3. Demonstrate initial traffic control.
4. Demonstrate the participation in ICS.

#### HOSPITAL:

1. Demonstrate the capability to activate the appropriate level of disaster response according to the disaster response plan.

#### EOC:

1. Demonstrate the capability of the local EOC to coordinate the comprehensive response activities.
2. Demonstrate the capability to conduct rapid situational assessment and response according to the Springfield Greene County EOP.

## After Action Report HAZMAT/Terrorist Tabletop Exercise

### Chapter 3: Exercise Events Synopsis

#### SCENARIO

It is a clear cool morning in Springfield Missouri. At 04:00 am, March 30, 2006 a scheduled, fully fueled cargo plane takes off from Springfield Branson National Airport. At 04:03 am when flying over MSU Campus the plane explodes spreading debris, fuel and fire over the campus area. At 04:05 what is left of the cockpit, lands on the southwest corner of campus across from Fire Station #1 on Grand.

The FBI intercepts a message from the terrorist group Hizballah claiming responsibility for the explosion of this cargo plane by an altimeter triggered bomb.

On Thursday March 30, 2006 04:00 am it is a clear cool morning. The 911 center receives a call from the Air Traffic Control Tower informing them they have just lost audio and visual contact with a large cargo plane. Citizens call in to 911 that there has been a large explosion and fire in the sky over Missouri State University (MSU) Campus. The Battalion Chief at Station 1 calls dispatch and confirms there has been an explosion over campus. The Chief sends out firefighters to survey the scene and sets up Incident Command System (ICS) at Station 1. Dispatch alerts the EMS, Fire, and Law Enforcement to respond to the incident. The EOC staff members are notified and the EOC is activated. Dispatch also utilizes the call down list for notification of personnel and Unified Command is initiated (UCS).

As information is coming in from responders and citizens, an MSU Security staff member responds to ICS and informs the commander that the 4 campus dorm's hold over 1900 students. Firefighters are performing search and rescue decontamination due to large amounts of plane fuel and the unknown HAZMAT of the cargo the plane was transporting. MSU Security wanted to open their on-campus EOC but it had been badly damaged along with their communications and power infrastructure. The discussion led to opening their EOC Downtown in Springfield; however the communication system is the same one as the on-campus EOC and was therefore unusable. Law Enforcement cut off major intersections around the incident as officers arrived on scene. ICS requested mutual aid from surrounding area's for Fire EMS and Law Enforcement. The EOC notified the ARES Ham radio operators, requesting they respond to the ICS. The EOC requested the 7<sup>th</sup> Civil Support Team (CST) Team from Ft. Leonard Wood, to respond for assistance.

ICS designated two triage locations; one South of the incident and one North. There are many walking wounded, cold and in shock. ICS requests the American Red Cross and Salvation Army be activated to care for the walking wounded,

displaced residents and responders. The Air Traffic Control Tower notifies the ICS the contents of the cargo aboard the aircraft contained chemicals, pesticides and foam forms.

The press and on lookers are arriving on scene police and responders are controlling them the best they can. ICS request the EOC set up for a press location and one representative and camera person be escorted to the perimeter of the scene only due to HAZMAT risk. ICS requested the UCS develop a plan to rotate the responders at the incident due to fatigue, food and water. The plan needs to be for the next several days as this incident is a large one. The Medical Examiner representative responds to the ICS to assess the situation for body storage and identification needs. EMS alerted the receiving hospitals of the possible scope of the incident. Triage and transportation is on going. Mutual aid EMS, Fire and Sheriff Department personnel are now responding to the regular Springfield 911 requests. The 911 operators are screening the calls for life threatening responses only until more help arrives.

The FBI notifies the Police Chief and TSA representative that they have intercepted messages from the Hizballah Terrorist Group that a bomb was placed in the cargo plane. It was set with an altimeter trigger device set to explode as the plane went over the MSU campus.

At this point the exercise is terminated.

# DRAFT

## AFTER ACTION REPORT

### Chapter 4: Analysis of Mission Outcomes

#### Emergency Assessment

Incident Command rapidly initiated an overall scene assessment identification of scope of incident. ICS rapidly responded to mass casualties by setting up two triage sites. Probability of a HAZMAT was noted. Decontamination areas were set up and operational. Search and Rescue was initiated along with fire suppression.

#### Incident Site Hazard Mitigation

Probability of a HAZMAT scene identified and decontamination area's set up and operational.

Requested Mutual Aid activated.

Requested EOC activation

Requested detailed information on the cargo loaded on the plane, and amount of fuel aboard.

Requested 7<sup>th</sup> Civil Support Team Fort Leonard Wood; for long-term mitigation.

#### Victim Care

Triage areas utilized.

Critical patients were transported to hospitals.

Search and rescue in progress.

Walking wounded needs address by American Red Cross and Salvation Army.

Notifications to Hospital providers completed.

Request for Mutual Aid done.

Decontamination is being done for victims.

#### Safety and Security

Law Enforcement blocked intersections as officers become available

Mutual aid requested

MSU security provided logistical information on possible number of victims and location of victims.

MSU Security provided information on equipment available for use.

MSU Security assisted Law Enforcement in scene security.

Barriers and tape requested from Public Works.

After Action report  
HAZMAT/Terrorism Tabletop Exercise

Chapter 5:

Analysis of Critical Task Performance:

**Task II–1 Dispatch First Responders and Establish Initial Communications.**

**Task III–1 Alert and Mobilize EOC Staff.**

- Immediately upon being informed of the situation, 911 dispatched Fire, EMS, and Law Enforcement. Dispatch also utilized the call down list and EOC notification in accordance with the Springfield Greene County EOP. Dispatchers also upon request dispatched Mutual Aid Response.

**Task II-2 Make Immediate Incident Scene Reports**

**Task II-5 Make Health Hazard Assessment**

**Task IV-2 Establish Incident Command**

**Task IV-3 Conduct Incident Command**

**Task VI-4 Decontaminate Patients at Incident Site**

- Springfield Fire Station # 1 across the street from the south end of the incident scene immediately sent out Firefighters to assess the scene and make initial reports. Incident Command established and operational from Station # 1. Firefighters noted a great deal of fuel and other unknown materials identified as possible HAZMAT scene. Established Unified Command as Commanders arrive on site then assessed incident & developed an action plan. Decontamination sites established. Triage sites identified and established for EMS responders.
- **Fire Department ICS identified the possibility of HAZMAT situation from the cargo and fuel on board.**

**Summary of Issue: Due to the magnitude of the scene and victims the recognition of a possible HAZMAT component was identified a little later than usual.**

**Consequence:** Some initial personnel were possibly exposed to a HAZMAT scene.

**Recommendation:** Unless there is a clear indication from airport personnel that there is HAZMAT issues beyond the fuel traditional HAZMAT priorities would fall below the immediate priorities of potential life loss and possible rescue. While HAZMAT is considered due to the nature of the incident the likelihood of a quantity of hazardous material associated with a bomb, surviving the initial blast and subsequent fire is not very high. While initial operations would be performed with fire crews in Level B protection with respiratory protection later operations would be conducted in appropriate attire as dictated by the material found or suspected. HAZMAT responses are not quick by its very nature. In this case the

level of protection afforded typical structure fire fighters is sufficient for the short term rescue mode that would follow such an event. Later operations after immediate life loss issue, are addressed would be handled in a HAZMAT Operation. Springfield Fire Department is an all risks department however the HAZMAT Team is made up of firefighters whose primary functions are EMS and Fire protection. The HAZMAT team is not a full time team they are a special call team whose members may be out on other calls when an incident occurs. This system is typical for most municipal HAZMAT Teams in the country. It would not be possible to have a full team response on a first alarm assignment as we do with EMS or Fire Calls. The response in this exercise would be as close to reality as is capable without a full time dedicated HAZMAT team used only for such responses.

**Improvement Plan:** Continue training within the scope and ability of the team and Fire Department will help maintain the current level of response capability. Further improvements to response capabilities would hinge upon additional team members being added to the department which would require additional budgetary consideration not currently available.

#### **Task VI-3 Provide Emergency Triage, Treatment and Stabilization**

#### **Task VI-7 Treat Patients at Screening Site**

#### **Task VI-8 Report Victim Status to EOC/Hospital**

#### **Task VI-10 Transport Patients to Hospital**

- Both Cox EMS and St. John's Ambulance services responded to the scene.
- Both made initial contact with Incident Command.
- Both services requested mutual aid, and worked triage, treatment and stabilization of patients. Set up screening sites to treat walking wounded.
- Notified receiving hospitals of victim status and transported critical patients to the hospitals.

#### **Task III-2 Activate, Expand and Operate the EOC**

- EOC Staff provided support and resources to enable the responders to accomplish their plan of action for this incident.
- The staff contacted the 7<sup>th</sup> CST team for response to assist in the long duration of an incident of this size.
- EOC Staff provide support and area for the JIC to work from
- Staff provided ARES ham radio operators a location and equipment for a base to provide communications in area's where needed.

#### **Task IV-5 Preserve Incident Scene**

#### **Task V-3 Activate Traffic and Access Control Points**

- Law Enforcement and MSU Safety staff worked with responders and ICS to establish traffic control points and scene security. Staff requested Public

Works to put up barriers and tape due to the large area involved in this incident. MSU Safety staff provided vital information to the ICS about possible number of victims and locations, also of locations outside of the incident area that could provide support such as generators and equipment.

- **MSU Safety Department attempted to open their off campus EOC due to the primary on-campus EOC and communications system was damaged. Opening the secondary off-campus EOC was discussed and that lead to the realization that both EOC's utilized the same communication system.**

**Summary of Issue:** MSU Safety staff had never participated in a tabletop exercise that damaged their main communication system to the degree that this exercise did. No one realized that utilizing the same communication system in both primary and secondary EOC locations could be a problem.

**Recommendation:** Research the possibility of independent or alternative communications ability at the off-campus EOC.

**Improvement Plan:** Work with IT department over the next year and research the possibility and probability of a back up or alternative communication system for each EOC location independently.

## **After Action Report**

### Hazmat/Terrorist Tabletop Exercise

#### Conclusions:

This Tabletop Exercise was the first time this group of responders had an incident of this magnitude on the MSU campus location. The tabletop was designed to assess the ability of the community responders to respond, assess and plan together by utilizing the ICS/UCS system in partnership with the MSU Safety Department.

Exercise participants completed all planned exercise objectives and demonstrated their abilities to work together utilizing the ICS/UCS and cooperation of Mutual Aid and EOC systems.

The Tabletop exercise challenged all the responding departments their ability to manage a large HAZMAT area, populated by students of up to 1900 in number over a large geographical area. This complex Tabletop scene produced mass casualties, search and rescue challenges, safety and security challenges along with the threat of terrorism. Though a challenging complex exercise, the responders utilized Springfield Greene County EOP and the NIMS system without any major errors or weaknesses. Exercise participants identified one previously un-tested possible weakness in the MSU Communication system.

The participating agencies can use the results of this exercise to further refine plans, procedures, and training for future use.

This exercise also identified several areas of information and education about information and resources known by the MSU Safety Department. The recommendation is that future exercises involving MSU Safety Department would benefit all participants.