



**Executive Summary of
Exercise
“TEAM SPIRIT”
April 15 & 22 2004**

*Compiled and Edited by the University
of Denver, Graduate School of
International Studies, Homeland
Security Program under the auspices of
the Jefferson County Office of
Emergency Management*

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Acknowledgments

The success of this project was dependent on the sustained support and professionalism of the planning staff and the over 300 participants who dedicated many hours to this effort. Special thanks are due to the Information Technology-Operations staff of Jefferson County for creating the table graphics used in this exercise; the American Red Cross and the Salvation Army for their logistical support in addition to their participation in exercise events; the Amateur Emergency Radio System volunteers for communications and role playing support; the Jefferson County Fairgrounds for their hard work in scheduling and hosting this event; the Environmental Protection Agency's National Enforcement Training Institute for its support in designing and documenting the exercise; the Mountain Resource Center and the Retired Senior Volunteers Program for the many roles played by their volunteers in support of this exercise; and the graduate students of the Denver University-Graduate School of International Studies Homeland Security Program for their creativity and hard work in the development, execution and documentation of this exercise. Special thanks are also due to the Colorado Office of Preparedness, Security and Fire Safety, the Colorado Division of Emergency Management and the Department of Homeland Security, Office of Domestic Preparedness for their support throughout this effort.

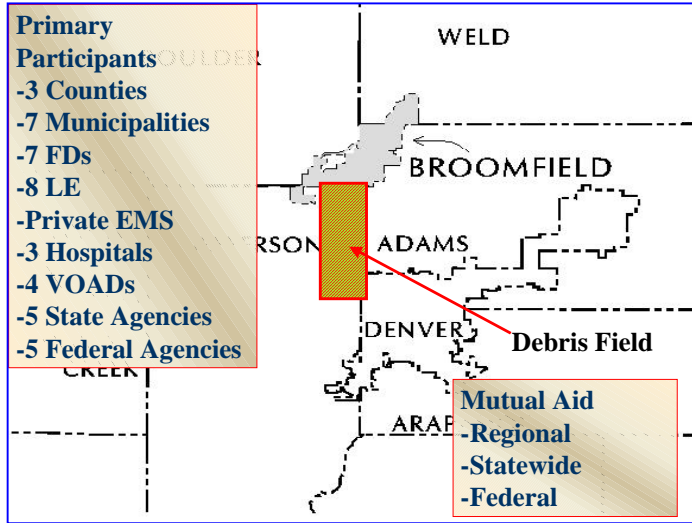
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Preface

This exercise and report are the products of a one-year cooperative effort of local, state and federal, public and private sector agencies and organizations. This broad partnership reflects the essential cooperation required and expected to prepare for, respond to and recover from large-scale terrorist event. This effort was coordinated by Jefferson County Emergency Management in close cooperation with Adams and Broomfield counties, the cities of Arvada, Golden, Lakeside, Lakewood, Wheat Ridge and Westminster, and numerous fire, law enforcement and service agencies. Numerous state and federal departments were also integral to this effort. Without the support, participation and investment by all of these agencies and organization, this project could not have succeeded. This effort has resulted in numerous improvements in our overall preparedness, planning, response and recovery for any potential large-scale emergency/disaster event. It has also highlighted the need for our continued commitment to this process of coordination, teamwork, adaptation and innovation to ensure our communities all-hazards preparedness keeps pace with the ever increasing risks inherent in today's world.

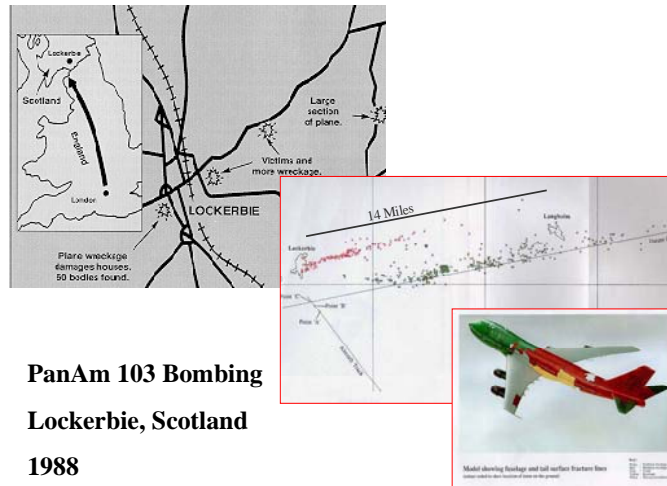
Exercise Summary

Jefferson, Adams and Broomfield counties hosted a large-scale Homeland Security exercise on April 15th and April 22nd 2004. This exercise, named Team Spirit, was intended to be a training event to help identify, examine, discuss, and resolve the issues involved in responding to a multi agency, multi jurisdictional, complex large disaster response. In addition to the three hosting counties, approximately 90 other

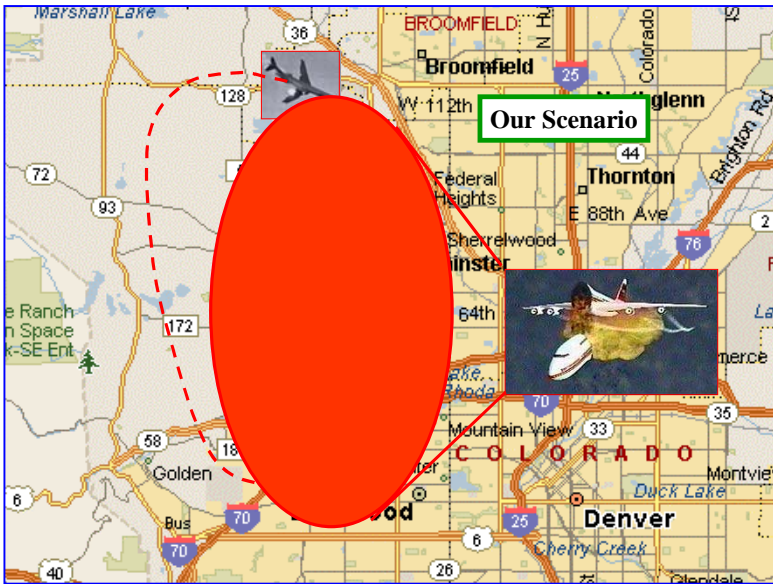


agencies and jurisdictions from the special districts, municipal, state and federal levels of government, several service/volunteer organizations and private sector businesses also participated in this event. Approximately 285-300 persons participated in both days of this event.

This exercise was based on the 1988 bombing of PanAm Flight 103 over Lockerbie Scotland. The Lockerbie event was caused by a bomb planted by agents of the Libyan government. The resulting explosion destroyed a Boeing 747 and killed 259 passenger and crew on the aircraft and 11 additional victims on the ground. This aircraft produced a debris field of 6 major impact sites and thousands of smaller impact sites over an area that was estimated to be 840 square miles.



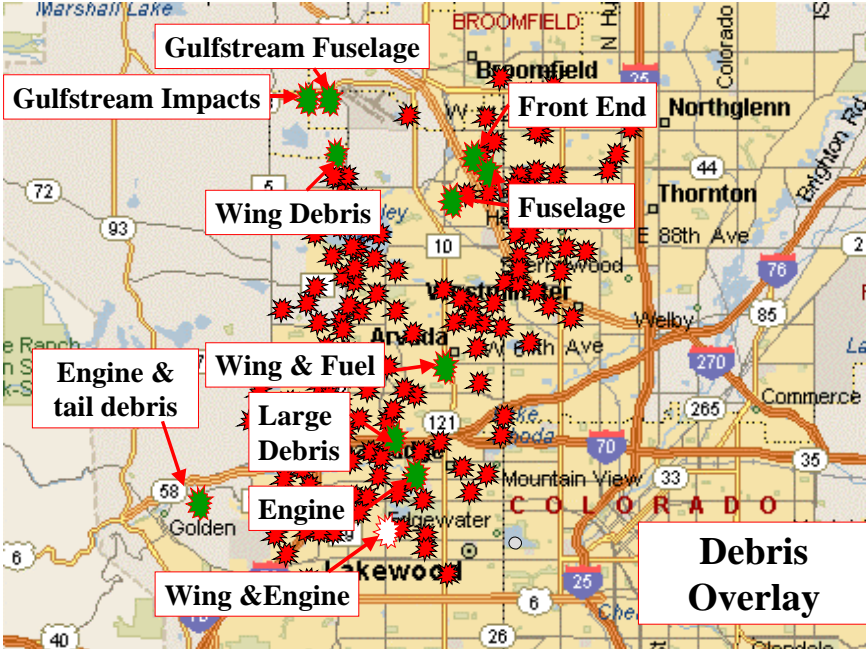
**PanAm 103 Bombing
Lockerbie, Scotland
1988**



For the purposes of this exercise, a similar event was simulated involving a large body passenger jet (an L-1011) with 259 on board. The scenario stated that as this aircraft departed Denver International Airport on the morning of April 15, 2004, it was observed to explode over the vicinity of I-70 and

Federal on the West Side of the Denver metropolitan area. Debris from this event fell over an approximately 110 square mile area which is bounded by 6th Avenue and 120th Avenue and Sheridan Ave and Indiana Avenue. Large and small debris impacts throughout this area were simulated/scripted into the exercise. In addition to this

scenario, victims were scripted into the exercise that included approximately 400 dead and seriously injured individuals on the ground. Unrelated routine emergencies and non-emergency events were also



scripted into the exercise. Scenario events were mirrored by 1000 scripted 911 calls which were placed to the nine Public Safety Answering Points (PSAPs) in the participating jurisdictions.

The exercise was designed to be a combined functional communications and “sandtable” exercise. The first phase of the exercise was initiated by fifteen volunteers placing 911 calls to all area PSAPs reporting an explosion and subsequent impacts as



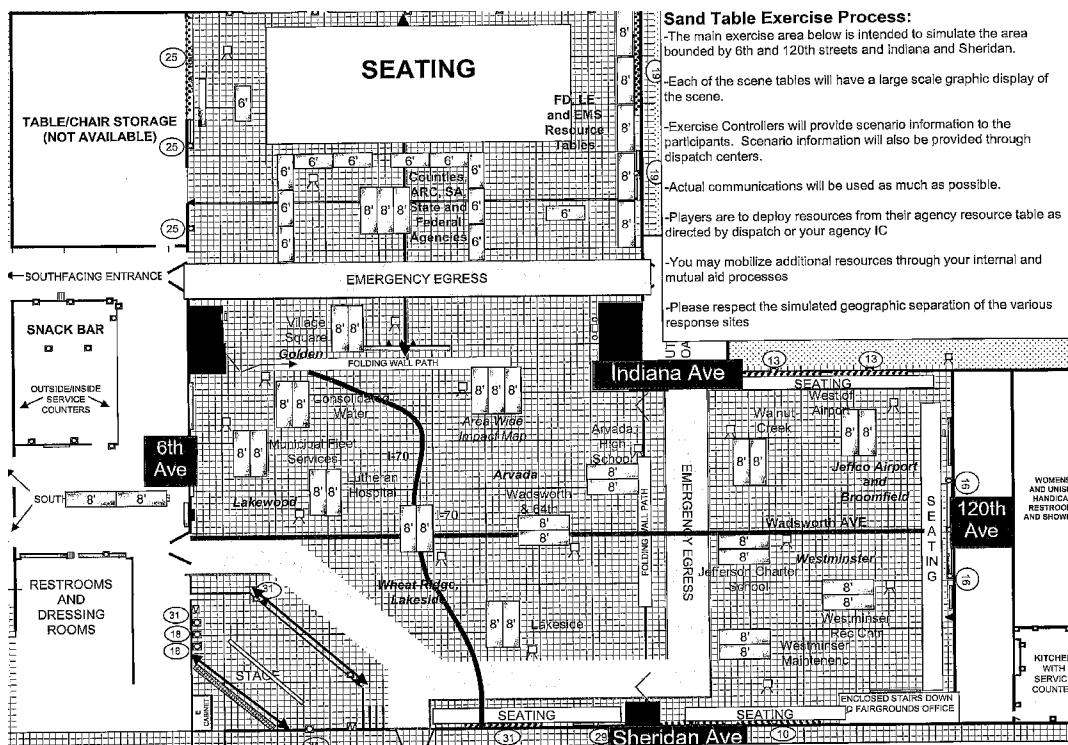
Communications

- Dispatch Centers
 - Arvada Police Dispatch
 - Arvada Fire Dispatch
 - Broomfield Dispatch
 - Evergreen Fire Dispatch
 - Golden Fire and Police Dispatch
 - Lakewood Police Dispatch
 - West Metro Fire Dispatch
 - Westminster Fire and Police Dispatch
 - Wheat Ridge Fire and Police Dispatch
 - Sheriff’s Office Dispatch
- Emergency Operations Centers (EOCs)
 - 1 County
 - 5 Municipal
- 4 Non-Interoperable Comms Standards
 - VHF, UHF,
 - 800MHz (Eriksson & Motorola)
 - Some “Blackboxes”
 - Amateur Emergency Radio Service (AERS)

Participating Communications Agencies and Centers

described above. 911 operators in the PSAPs initiated dispatch of participating response agencies using actual communications equipment and procedures. The bulk of participants during this phase of the exercise were at the Jefferson County Fairground Building where the exercise planning group had constructed a “sandtable.”

The sandtable exercise format is one of the oldest and most effective tools for the conduct of exercises emphasizing command, control, communication, resource



Sand Table Exercise Process:

- The main exercise area below is intended to simulate the area bounded by 6th and 120th streets and Indiana and Sheridan.
- Each of the scene tables will have a large scale graphic display of the scene.
- Exercise Controllers will provide scenario information to the participants. Scenario information will also be provided through dispatch centers.
- Actual communications will be used as much as possible.
- Players are to deploy resources from their agency resource table as directed by dispatch or your agency IC
- You may mobilize additional resources through your internal and mutual aid processes
- Please respect the simulated geographic separation of the various response sites

Sandtable Exercise Floorplan

management and coordination. In this exercise, an auditorium measuring 100ft by 160ft with an adjacent seating/staging area was used to simulate the geographic area described above. Based on the objectives of the exercise, the exercise planning group identified 12 major impact sites within the simulated area.

Each of these impact sites was reconstructed using large-scale tabletop graphics produced by the Jefferson County Department of Information Technology-Operations.



Broad Area Coordination Sandtable



Table Top Graphic for the Sandtable

The response resources of participating agencies were simulated using several hundred matchbox cars. As players received calls from the dispatch centers, they picked up their respective toy car (resource) and

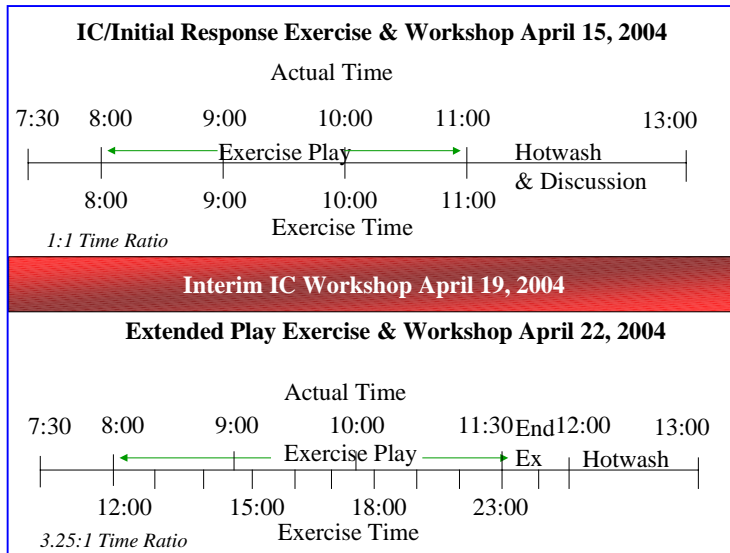
deployed as directed into the exercise play area. Once “on scene,” they received a situation overview from the controller, established incident command, and began deploying, coordinating and responding.

Additional situational awareness was provided through the use of scale models and other props to simulate the impact sites and stimulate player activity. Controllers used additional scripted inputs, victim description cards, and free play interaction to



Sandtable Resources

further facilitate player activities. This phase of the exercise emphasized dispatch operations, initial deployment and size-up, and initial response. The exercise was suspended after two hours to allow players to brief all participants on current response



activities and issues. These situation briefings were followed by a two-hour Incident Commander's Workshop to discuss Incident Action Planning and the challenges presented to our response efforts by a scenario of this size. Based on the interest of the players, an interim meeting was

scheduled and held to continue discussion of the issues and possible response options identified in this initial workshop.

During this interim meeting, the incident commanders from each major impact table and representatives from a broad range of local, state, and federal agencies continued to examine the challenges and possible solutions presented by this type of large-scale multi jurisdictional event. It was determined that during the early phases of the exercise, the existing system of independent jurisdictional response would form the core of our efforts. However, as demonstrated during the sandbox portion of the exercise, current local procedures do not allow for the effective coordination and prioritization of resources over a broad area. In response to this realization, the Incident Commander's group became proponents of establishing a Multi-Agency Coordination (MAC) Group to improve resource management and support planning efforts of the Incident Commanders

The second phase of the exercise was held on April 22, 2004. During this phase, the sandtable portion of the exercise picked up with the Incident Commanders presenting

their incident action plans for the remainder of the first operational period (10:00-23:00). Play at the sandtable picked up at the three-hour response point and continued through the remainder of the exercise period. Dispatch play was discontinued, but eight Emergency Operations Centers at the municipal, county, and



Incident Commander Briefing IAP

state levels were activated in support of response and recovery efforts. In addition to the continuation of the sandtable exercise and the EOCs, the ad hoc MAC Group, that was discussed during the interim meeting, was activated and supported player activities throughout the remainder of the exercise.

Exercise play continued for two hours after which each Incident Commander and his staff were invited to present a transition briefing to their relief crews. These hand-

over briefings marked the end of exercise activity. A two-hour informal debriefing was held immediately after the exercise for both EOC and sandtable participants. All exercise activities were observed and documented by contract support staff



Site Discussion & Debrief

provided by Denver University Homeland Security Program, exercise participants, and controllers.

Key observations on the exercise are:

Although participating agencies demonstrated strong tactical communications and field procedures/operations, existing planning and procedures for broad area, multidiscipline multi-jurisdictional communication, coordination and resource management need additional emphasis.

Frustration and confusion during the initial response phase was a common observation. Response agencies in the field were not provided any broad area situational awareness to help them understand the scale of this event. There is currently no established single point of contact responsible for rapidly developing the broad area situation assessment need to effectively coordinate and prioritize resources during the early phases of an immediate on-set catastrophic event like the one presented by this exercise.

Some agencies continue to demonstrate a need for additional/advanced ICS/NIMS training. Addressing this training need could significantly enhance operations at the tactical and operational levels.

Training, concept development, planning and exercises on the Multi-Agency Coordination Group or Metro Incident Management Team/Group is needed. Local experience in applying this concept in an urban environment is limited and needs to be improved.

The establishment of a Multi-Agency Coordination Group (MAC Group) or Metro Incident Management Team/Group should be explored and developed as a significant potential enhancement for response to broad area emergencies and disasters.

A comprehensive resource database and procedures for its maintenance are needed. These tools would enable us to better prioritize and coordinate resource utilization during large-scale events.

Authorities for broad area response need to be examined, clarified and formalized. Fiscal and legal authority and responsibility are vested in a range of local jurisdictions. Efforts to resolve “command and control” will be limited by this political reality. This is a policy issue that may require development of an Intergovernmental Agreement (IGA).

Training and implementation of unified and area command concepts in NIMS needs to be integrated into broad area training, exercises and planning.

Communication, coordination and resource management can be improved/addressed within the existing legal, fiscal and response structure. We need to develop and improve communications, coordination and situational awareness between the multiple IC sites and the multiple EOCs.

Procedures and coordination between the dispatch centers need to be refined to improve the coordination of tasking to shared response agencies.

Procedures for interagency mutual aid requests need to be reviewed and improved. We need a broad area resource mobilization plan.

Broad area communications procedures and planning need to be improved.

Planning and procedures need to be refined to address the demands of “Immediate On-Set Disasters” such as air disasters, explosions, and earthquakes.

EOCs need to refine their internal procedures, checklists and contact databases.

The EOC roles and responsibilities of smaller municipalities need to be more clearly established. Should they be integrated into the EOC of a larger neighboring municipality, the county EOC, or some other structure such as a MAC Group?

There is a need for a Technical Hazards Assessment to examine the risk posed by air, rail and highway transportation systems, manufacturing, and other activities that could be exploited by a terrorist attack that would produce a large-scale technical emergency/disaster. This type of assessment, along with a natural hazards assessment should become periodic efforts to track “Risk Creep” and ensure preparedness and prevention/mitigation efforts are keeping pace with community development and other factors potentially effecting public safety.