

AFTER ACTION REPORT

San Luis Valley Digital Trunked Radio (DTR) Functional Communications Exercise For Saguache County

**Conducted April 28, 2007 at the Saguache Community Center
in Saguache, Colorado**

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Prepared by

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San Luis Valley Exercise Design Team for This Exercise

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TABLE OF CONTENTS

Topic	Page Number
Executive Summary	3
Background Information	5
Goals and Objectives	6
Overall Objectives for Each Discipline	6
Pre-Exercise Activities	7
Participants and Agencies	8
Exercise Director and Senior Controller	11
Assistant Exercise Director and Senior Controller	11
Controllers	11
Evaluators	11
Observers	12
Description of Exercise Scenario	12
Accomplishments and Shortfalls	13
SLV Exercise Design Team Comments	15
Summary of the “Hot Wash” Debriefing	20
Written Comments from Exercise Participants	22
Recommendations	23
Training Needs	23
Changes to the Emergency Plan	23
Improvement Matrix	24

Executive Summary

The purpose of this exercise was to introduce DTR radio protocols utilizing common channels that are already programmed into all DTR radios. Participants used the Saguache County Mutual Aid Channel (SAGMAC), Fire agencies used the radio-to-radio Simplex 1 (SIMP 1), Law Enforcement agencies used SIMP 2 and Emergency Medical Services used SIMP 3. The SLV Exercise Design Team provided a fictional scenario where exercise participants could use DTR radio protocols to coordinate their emergency response actions with other agencies.

To limit the complexity and scope of the exercise the San Luis Valley Exercise Design Team decided to restrict the exercise to only Saguache county. Additionally, exercise participants were limited to American Red Cross, Fire Department, Law Enforcement agencies and Emergency Medical Services agencies.

Several months before the exercise, Jon Montano and Dave Pote provided National Incident Command System (NIMS) training to most of the exercise participants. Part of the NIMS training contained a “DTR 101” class on the general operation of the radio, how to switch channel and functions of various radio buttons and switches.



Initially, all exercise participants and staff assembled at the Saguache Community Center, located in the Town of Saguache.

Before the exercise started, Jon Montano (San Luis Valley RETAC Coordinator) gave a PowerPoint presentation on the basic principals of the Incident Command System (ICS).

After Jon concluded his ICS presentation, Pam Stewart (CSP

Regional Communication Manager) gave a PowerPoint presentation on DTR radio protocols. Pam’s presentation included several “demonstration-performance” steps where participants were required to duplicate radio procedures presented by Pam.

The mock exercise site was located at the intersection of County Road T and Colorado Highway 17 in the unincorporated community of Moffat. This site was chosen because emergency responders are frequently unclear on which agency has jurisdiction in this area. To make the exercise realistic in this respect, the initial 911 call for Fire and Emergency Medical Services was purposely misrouted to agencies located in the Town of Saguache instead of Crestone and Moffat. Exercise participants quickly sorted out this “engineered confusion” and proceeded as they would in an actual situation.

Exercise controllers located within the Community Center building were given short-range hand held “walkie talkie” unit to communicate between themselves and the Exercise Director. Controllers located in other areas within the Town of Saguache were given VHF radios for exercise communications. The controller located in the Center Police Dispatch used a DTR radio set to “Mineral County Mutual Aid Channel” to pass exercise traffic.

Two dispatch center played a role during the exercise: Center Police Dispatch Center and Saguache County Sheriff’s Dispatch Center. The reasons both dispatch center were used was because the incident was in the county, outside of any municipality and the close proximity of Moffat. Both dispatch centers had to coordinate their activities, as they occasionally do during actual emergencies.

At the beginning of the exercise, participants experienced some awkwardness with the DTR radio protocols. As is with all new technology and concepts, some problems were anticipated and participants quickly adjusted to the situation.

As responders received exercise injects simulating their dispatch center sending them to the incident scene, they were prompted to announce their arrival to the IC on the Saguache Mutual Aid Channel (SAGMAC).



Once an Incident Commander (IC) was selected, the IC began to assemble his command staff. His staff consisted of representatives from Law Enforcement, Fire Departments and Emergency Medical Services. The IC and his staff left the Saguache Community Center and assembled aboard the Alamosa County Sheriff’s Incident Command Vehicle. The vehicle was located in the Saguache Community Center parking lot, just outside the community center building.

This unified command configuration provided the IC with an efficient method to coordinate activities between the three disciplines and Saguache County Sheriff’s Dispatch Center. At this point, exercise participants began to effectively use DTR radio protocols.

The IC followed DTR radio protocol and remained on the Saguache MAC to communicate information between him and the Saguache County Sheriff’s Dispatch Center. Upon their arrival at the incident scene, other disciplines followed DTR radio protocols and communicated on the following DTR channels:

- Fire Department personnel selected “Simplex Channel 1” (SIMP 1)
- Law Enforcement personnel selected SIMP 2
- Emergency Medical Service personnel selected SIMP 3

The exercise scenario grew in complexity and the participants responded to the needs of the situation as they were handed exercise injects by the Controllers. After injects identified an ammonium nitrate and fuel oil (ANFO) bomb discovered in a vehicle stopped by the accident, the IC called for a one mile radius evacuation and the exercise was terminated.



After the exercise concluded, a debriefing or “hot wash” was conducted with all participants. Then exercise participants were asked to fill out a written critique. One of the questions was “Please rate the overall exercise on the following scale” (1 being worse and 10 being best). The average score for this question was 7.4.

We thank Saguache County Fire Auxiliary for providing three volunteers who helped with morning snacks and the afternoon lunch service.

We thank David Osborn, SLV Regional Public Health Planner, for being our Safety Officer for this exercise.

Saguache County Sheriff’s Deputy Kyl Torr did a great job as Incident Commander. He was essentially thrown into this position with no warning, but managed to pull things together as the exercise progressed.

A very special thanks goes out to Saguache County Emergency Manager Kimberly Bryant who took notes during the “Hot Wash” post-exercise debriefing.

Background Information

Radio communication between various emergency response disciplines has historically been poor to often non-existent. If an agency did not have the frequency of other agencies programmed into their radio, communication was not possible.

About ten years ago, several Colorado State agencies began to build the infrastructure for a Digital Trunked Radio (DTR) system. The purpose of this system was to enable local and state emergency response agencies to communicate between themselves on a statewide basis. These new DTR radios are components to a growing, statewide communication project to provide seamless and reliable interoperable communication between emergency response agencies in locations all around the State of Colorado.

San Luis Valley officials (All-Hazards Committee) came together in early 2003 and made a decision to join the State of Colorado DTR system.

Since late in 2004, emergency response agencies within the San Luis Valley region have been receiving DTR radios through Homeland Security grant programs. At the time of this writing, most agencies have their DTR radios, but a few agencies still have not received them.

The DTR radio system directly supports one of the State Homeland Security capabilities called “Interoperable Communications”. Aside from the nearly crystal clear voice audio on the radios, probably the most important feature is commonality of radio channel talk groups contained in all DTR radios used in the State of Colorado.

San Luis Valley emergency response agencies have been using their DTR radios on a daily basis to communicate and coordinate action with their own agency and their dispatch center. However, during emergency responses involving multiple agencies communications between emergency responders have been hampered because of a lack of familiarity with common communication channels.

This exercise introduces a new paradigm in communication practices and behavior for each DTR radio user to communicate with other disciplines and coordinate their activities on channels contained in all DTR radios. Using the San Luis Valley DTR Protocols, absolutely no changes to DTR radios are needed. Each DTR radio in the SLV and state-wide have a common set of channels. This exercise and the SLV DTR Protocols merely make use of those common channels to command, control and communicate during emergencies.

Goals and Objectives

Exercise goals and objectives for the San Luis Valley Digital Trunked Radio System tabletop exercise are as follows:

Goal – Establish initial Incident Command structure and utilize communication protocols between all responding emergency response units and personnel.

Objectives

1. Within 5 minutes of arrival at a disaster or emergency scene, the senior emergency responder will assume the duties of Incident Commander and coordinate actions between first responders at the scene and Saguache County Sheriff’s Dispatch Center.
2. Within 5 minutes after being dispatched to a disaster or emergency scene, each emergency response unit will demonstrate their ability to follow DTR radio protocols to contact the Incident Command to receive initial instructions.
3. Upon arrival at a disaster or emergency scene, each participant will demonstrate their ability to follow DTR radio protocols with appropriate MAC or simplex

channels to contact and coordinate actions between responders of the same discipline.

4. Each participant will use the DTR radio to transmit at least two messages during the exercise.

Overall objectives for each discipline are as follows:

Fire Department

- Evaluate the process used to determine the level of response.
- Evaluate the DTR radio coordination with local Law Enforcement and Emergency Medical Services in rescue operations at the incident scene.
- Evaluate the ability to function under Incident Command System.

Law Enforcement

- Evaluate the establishment of scene security and definitive inner and outer perimeters.
- Evaluate the DTR radio coordination with Fire Department and Emergency Medical Service in rescue operations at the incident.
- Evaluate use of pre-established procedures to mobilize all necessary Law Enforcement personnel and resources.
- Evaluate the ability to function under Incident Command System

Emergency Medical Services

- Evaluate the establishment of measures necessary for medical services at the incident.
- Evaluate the DTR radio coordination with local Law Enforcement and Fire Department in rescue operations at the scene.
- Evaluate the establishment of a staging area for all responding medical equipment
- Evaluate establishment of a communication procedure for interaction with other response agencies.
- Evaluate the ability to function under Incident Command System.

Each exercise participant was given a statewide MAC channel to make contact with a representative located in the Colorado Department of Emergency Management Command

Post located at the facility in Centennial, Colorado on Mutual Aid Channel 9 Southeast (M9 SE). The purpose of this activity was to demonstrate the long-range capabilities of the DTR radio system.

A number of exercise injects were developed to drive DTR radio traffic between participating agencies to give everyone practice in locating and using various common channels found in all DTR radios. As an example, a Saguache County Deputy Sheriff's was given an inject that directed him to contact any Emergency Medical Service unit at the incident scene. Injects similar to the example were developed for all disciplines participating in the exercise.

Pre-Exercise Activities

Alamosa County Sheriff's Dave Stong provided his Incident Command Vehicle for previous exercises in Alamosa, Conejos, Costilla, and Rio Grande County and agreed to provide it again for this exercise. This provided a realistic situation for the Incident Commander and his unified command staff.

Several months in advance of the exercise, representatives from the San Luis Valley Exercise Design Team contacted Saguache Community Center officials to discuss the possibility of using the building as the exercise site. Community Center officials agreed to provide the building, located at 525 7th Street in Saguache

The Saguache Community Center building was also selected because of the following reasons:

- The DTR radio signal strength was good in the area.
- Plenty of parking space for exercise staff, participants and observers.
- The Community Center location was well known to everyone involved in the exercise

Participants and Agencies

The following agencies (in alphabetical order) and individuals were the exercise participants:

- Saguache County Sheriff's Office
- Saguache County Sheriff's Office Dispatch Center
- Center Police Department
- Center Police Department Dispatch Center
- Center Fire Department
- Northern Saguache County Fire District agencies
 - Saguache Fire
 - Bonanza Fire
 - Villa Grove Fire
 - Moffat Fire

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- Crestone Fire
Saguache County Emergency Medical Service
Center Emergency Medical Service
Baca-Grande Fire Department
Baca-Grande Emergency Medical Service
Hazardous Materials Team (Colorado State Patrol and/or San Luis Valley)
Alamosa Regional Colorado State Patrol Communications Center

The following Exercise Design Team members, with their exercise positions, were present during the exercise:

Exercise Director and Senior Controller

Dave Pote
San Luis Valley Exercise Design Team
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Deputy Exercise Director and Senior Controller

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Safety Officer

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Controllers

American Red Cross

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Center Emergency Medical Services

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Center Police Department Dispatch Center

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Center Volunteer Fire Department

Jim Felmlee
Center Volunteer Fire Department
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Hazardous Materials

Jim Clare
San Luis Valley Rural Electric Cooperative
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Incident Command

Sheriff Dave Stong
Alamosa County Sheriff
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Law Enforcement

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Saguache and Baca Crestone Emergency Medical Services

Merlinda Lopez
Monte Vista Ambulance Service
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Saguache, Baca Grande and Crestone Volunteer Fire Department

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Saguache County Sheriff Dispatch Center

Kenric Holman
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Evaluators

American Red Cross

Barbara Robbins
San Luis Valley Chapter - American Red Cross
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Center Emergency Medical Services

Jon Montano
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Center Police Department Dispatch Center

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Center Volunteer Fire Department

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Hazardous Materials

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Incident Command

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Saguache and Baca Crestone Emergency Medical Services

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Saguache County Sheriff Dispatch Center

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Description of the Exercise Scenario

Exercise Scenario

The exercise scenario starts with a two-vehicle accident in Saguache County, in the community of Moffat at the intersection of Highway 17 and County Road T. The scenario builds in complexity, requiring participants to organize themselves in accordance with the Incident Command System (unified command structure) and coordinate activities with their DTR radios.

1. A 14-passenger van full of senior citizens traveling North on Highway 17 collides with an anhydrous ammonia truck traveling South on Highway 17 at junction of CR T in the town of Moffat.
2. 12 senior citizens are injured and one is dead; driver of the anhydrous ammonia truck is injured and trapped inside his vehicle.
3. Smoke and flame begins to issue from the vehicle engine area; anhydrous ammonia is not leaking from the tank at this time.
4. A citizen living near CR T calls 911 on their land-line home telephone to report accident (the caller does not report any injuries, just two car accident). The caller hangs up before the 911 operator can get more information.
5. Saguache EMS is notified by CSP Alamosa Regional Communication Center (this is intentionally the wrong notification).
6. Saguache EMS notifies 911 Dispatch of the CSP Dispatch error; CSP Dispatch notifies Saguache County Dispatch and provides situation report.
7. Weather conditions: Sky is clear with scattered clouds, temperature is 35° F, relative humidity is 25% and no wind.
8. The first person to respond to the 911 call is a Saguache County Deputy Sheriff and calls Saguache County Sheriff Dispatch for assistance.
9. Fire and EMS Departments from NSCFPD, Center and Baca are called for mutual aid assistance.

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10. The U.S. Department of Transportation Hazardous Materials placard on the side of the truck reads “1005” for anhydrous ammonia.
11. Red Cross is notified and requested to provide support to first responders with food and water.
12. Law Enforcement stops traffic in both directions on the Highway 17 at CR G and CR AA and determines which detour is best.
13. The Incident Commander contacts Saguache County Sheriff Dispatch Center to request the Alamosa County Sheriff Incident Command Vehicle.
14. One of the stopped vehicles is an older Volkswagen mini-bus covered with anti-war slogans and two occupants.
15. Anhydrous ammonia vapors begin to leak from the truck – vapors migrate vapors are beginning to migrate NW toward the Moffat School
16. The Incident Commander requests Hazardous Materials support through Saguache County Sheriff Dispatch.
17. A group of school kids playing in a playground at Moffat School, ¼ miles NW of the accident are overcome by anhydrous ammonia vapors.
18. Newspaper reporters from the Valley Courier and Pueblo Chieftain arrive and want information.
19. Weather conditions: Sky is clear with scattered clouds, temperature is 35° F, relative humidity is 25% and wind is now moving slowly northwest at 2 miles per hour.
20. Red Cross Disaster Action Team (DAT) coordinates with Saguache County Sheriff Dispatch and begins to locate shelter and food for evacuees.
21. Incident Commander organizes Law Enforcement assets on scene to begin notification and evacuation of citizen living downwind in Moffat.
22. A SCSO Deputy starts to talk to the driver of the VW mini-bus because he appears very nervous; the Deputy grows suspicious of the driver when he smells fertilizer and fuel oil odor and sees an AK-47 partially covered by a coat.
23. The driver hits the SCSO Deputy with the truck door, knocking him down – driver starts running east on County Road T. Passenger runs west.
24. The SCSO Deputy thinks the VW mini-bus may contain ammonium nitrate and fuel oil (ANFO) bombs.
25. The Incident Commander orders first responders to evacuate upwind and cross wind from the anhydrous ammonia vapor plume.
26. The Incident Commander calls Saguache County Sheriff Dispatch for a bomb squad to evaluate the VW mini-bus.
27. Saguache County Sheriff Dispatch contacts Fort Carson Explosive Ordnance Disposal (EOD) team for assistance, but dispatch is informed they are all deployed to Iraq. The closest bomb squad is located in Colorado Springs.

Accomplishments

Exercise goals and objectives were all accomplished, but not within the allotted time. The most time-consuming delays were:

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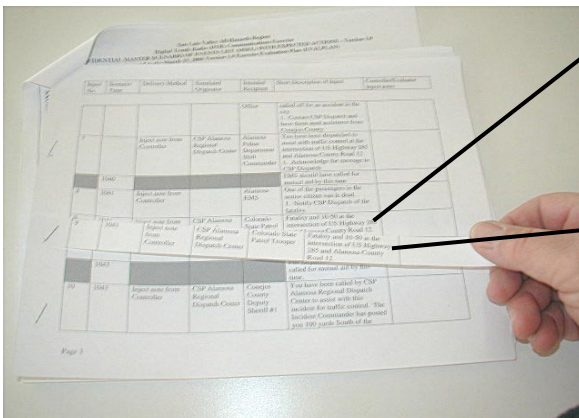
- The Incident Commander did not assume his role for 10-15 minutes after it was apparent he was that person.
- The same time delay took place during selection of agency representatives that would constitute the Unified Command group to assist the Incident Commander.

A Saguache County Deputy was given an inject that made him the first exercise participant to arrive on-scene. This was a critical first component of the Incident Command structure.

According to Jack Cobb, Communications Manager, Colorado Department of Emergency Management in Centennial, CO approximately 14 exercise participants had an opportunity to make radio checks using their portable DTR radios. Participants were given an inject slip which instructed them to select “M9SE” (State-wide Mutual Aid Channel 9 South East) and asked to make a radio check with Denver area CDEM personnel. This gave the DTR radio users a sense of how powerful even the small portable DTR radios were. Most users were impressed and a came away with a new sense of confidence in their equipment.

Controllers handed written “injects” from the Master Scenario of Events Listing (MSEL) to exercise participants at pre-selected times. There were actually two sets of the MSEL. One version was the standard MSEL with a description of each inject printed on white paper. The second MSEL contained all the same information but was printed on yellow paper.

Controllers cut the yellow colored MSEL into paper strips, each strip containing one inject. These strips were then stapled to the white colored MSEL. At the designated time, the Controller simply pulled off the yellow inject and handed it to an exercise participant. Since Controllers still had the white MSEL in their hand, it was easy for them to determine which inject had been given and which injects which had not. This photo shows how this process was managed:



This area of MSEL contains the inject information along with the expected action on the part of the recipient.

This slip of yellow paper (white in this photo) is the actual inject that the Controller handed to each recipient.

Each time a Controller passed an inject to an exercise participant, the Controller announced the inject number on their “walkie talkie” radios. Even though there were only a few minutes between injects, this procedure helped all Controllers stay on time with exercise injects.

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Written material handed out to participants was easily understood and worked well.

Several senior San Luis Valley officials attended the exercise as observers:

- Doug Davie – Rio Grande County Commissioner and President of the Monte Vista Fire Board
- Joe Hamilton – Saguache County Commissioner
- Mike Norris – Saguache County Sheriff
- Robert Jackson – Captain, City of Alamosa Police Department

Shortfalls

Center Police Department Dispatch Center does not have the capability to electronically record telephone or radio traffic. If the dispatcher misses information, they must call back to the source.

The pre-exercise briefing to all participants did not stress the need to periodically state “this is an exercise message”, consequently a few Saguache County emergency responders that were not participating in the exercise overheard radio traffic and responded to the mock accident scene as if it were a real emergency.

Exercise participants did not consistently repeat messages back to insure the understood the message sent to them.

Once a staging area is identified by the Incident Commander, dispatch should send units to this staging area rather than directly to the incident site. At the staging area, arriving units can get a situation briefing, to include radio channel assignments.

Many of the exercise participants were not familiar with their DTR radios (buttons, switches, etc.) This was especially true of the smaller volunteer fire departments. Motorola (the manufacturer of the DTR radios) has held two “train-the-trainer” seminars on how to use the XTL2500 radio. Unfortunately, these seminars were lightly attended. The intent was for the attendees to travel back to their agencies to conduct “DTR 101” training to their colleagues. That has not happened to the level hoped for.

San Luis Valley Exercise Design Team Comments Regarding Exercise Goals and Objectives:

Goal – Establish initial incident command structure and establish communication between all responding emergency response units and personnel.

Objective 1 – Within five (5) minutes of arrival at a disaster or emergency scene, the senior emergency responder will assume the duties of Incident Commander and coordinate on-scene activities with Saguache County Sheriff’s Office Dispatch Center and Center Department Dispatch Center.

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Robert Jackson (Evaluator for Law Enforcement)

- The first Saguache County Deputy to arrive on scene did not assume the duties of Incident Commander until about 15 minutes passed.

Scott Alexander (Evaluator for Saguache and Baca Crestone Emergency Medical Service)

Jon Montano (Evaluator for Center Emergency Medical Services)

Treat Suomi (Evaluator for Center Volunteer Fire Department)

Wes Moores (Evaluator for Saguache, Villa Grove, Baca Grande and Crestone Volunteer Fire Department)

Pam Stewart (Evaluator for Center Police Dispatch Center)

- The dispatcher was able to monitor SAGMAC as well as real world traffic.

Mike Norris (Evaluator for Saguache County Sheriff's Dispatch Center)

- We noticed some “echo” problems in DTR portable radios.
- The Incident Commander called for representatives from Fire and EMS. This was done to establish the Unified Command.

Mark Werts (Evaluator for Incident Command)

- Saguache County Deputy Kyl Torr didn't advise dispatch that he was the Incident Commander upon assuming that position; this occurred some time later.
- EMS Unified Command representatives from Center, Baca Grande and Saguache did not check in with the Incident Commander
- Two EMS representatives entered the Command Vehicle but were not given instructions on what their duties would be.
- The Incident Commander wound up supervising more than the recommended 7 personnel; span of control was too large.
- Recommends only one representative from each discipline arrive to form Unified Command with the Incident Commander; each representative would speak for all agencies of the same discipline.

Kenric Holman (Evaluator for Monte Vista Police Dispatch Center)

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Barbara Robbins (Evaluator for Red Cross)

Lawrence Martin (Evaluator for Hazardous Materials)

Objective 2 – Within five (5) minutes after being dispatched to a disaster or emergency scene, each emergency response unit will demonstrate their ability to follow DTR radio protocols to contact the Incident Command to receive initial instructions.

Robert Jackson (Evaluator for Law Enforcement)

Scott Alexander (Evaluator for Saguache and Baca Crestone Emergency Medical Service)

Jon Montano (Evaluator for Center Emergency Medical Services)

Treat Suomi (Evaluator for Center Volunteer Fire Department)

- Once dispatched, exercise participants switched to SAGMAC.
- Responding units were able to find and use SAGMAC in a timely manner
- Center FD did not acknowledge the second announcement of road closures.

Wes Moores (Evaluator for Saguache, Villa Grove, Baca Grande and Crestone Volunteer Fire Department)

- As above, responding units were able to find and use SAGMAC in a timely manner
- Baca Grande Volunteer Fire Department did not receive a message to respond from dispatch

Pam Stewart (Evaluator for Center Police Dispatch Center)

Mike Norris (Evaluator for Saguache County Sheriff's Dispatch Center)

- Dispatch directed fire and EMS to contact the Incident Commander on MAC 15 Southwest, not SAGMAC as described in the SLV DTR Protocols. Responding unit still managed to maintain effective communications.
- Fire and EMS did not switch to Simplex channels in a timely manner when they arrived on scene.

Mark Werts (Evaluator for Incident Command)

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Kenric Holman (Evaluator for Monte Vista Police Dispatch Center)

Barbara Robbins (Evaluator for Red Cross)

Lawrence Martin (Evaluator for Hazardous Materials)

- Alamosa Regional Communications Center (ARCC) contacted CSP Hazardous Materials Team (HazMat) by normal DTR dispatch channel.
- CSP HazMat attempts to contact Saguache County Sheriff Dispatch, but dispatch did not answer.
- CSP HazMat contacts San Luis Valley HazMat by cell phone to make initial coordination.
- ARCC contacts CSP HazMat and advises them to switch DTR radios to SAGMAC to contact the Incident Commander.

Objective 3 – Upon arrival at a disaster or emergency scene, each participant will demonstrate their ability to follow DTR radio protocols with appropriate MAC or SIMPLEX channels to contact and coordinate actions between responder of the same discipline.

Robert Jackson (Evaluator for Law Enforcement)

Scott Alexander (Evaluator for Saguache and Baca Crestone Emergency Medical Service)

Jon Montano (Evaluator for Center Emergency Medical Services)

Treat Suomi (Evaluator for Center Volunteer Fire Department)

- When using any radio system, Villa Grove Fire needs to first state who they are calling and then identify themselves second.
- Center Fire and Center EMS did not seem to understand how to use the SLV DTR Protocols.
- Radio users need to wait to hear acknowledgement of the station they are calling before transmitting their message.

Wes Moores (Evaluator for Saguache, Villa Grove, Baca Grande and Crestone Volunteer Fire Department)

Pam Stewart (Evaluator for Center Police Dispatch Center)

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Mike Norris (Evaluator for Saguache County Sheriff's Dispatch Center)

Coroner could not be contacted with DTR radio. Did make contact using telephone.

Mark Werts (Evaluator for Incident Command)

Kenric Holman (Evaluator for Monte Vista Police Dispatch Center)

Barbara Robbins (Evaluator for Red Cross)

Lawrence Martin (Evaluator for Hazardous Materials)

- Upon arrival, both HazMat teams use MAC 13 SW to coordinate activity.
- One of the HazMat team members attempted to contact Fire on MAC 14 SW (proper MAC channel for fire departments in Southwest Colorado), but learned the Fire representative moved Fire units from MAC 14 SW to MAC 15 SW (this MAC is reserved for Law Enforcement agencies.)
- Incident Commander moves Fire, Law Enforcement and EMS to MAC 13 SW, MAC 15 SW and MAC 14 SW, respectively. HazMat channels not mentioned by Incident Commander.

General Comments from Exercise Team Members:

Robert Jackson (Evaluator for Law Enforcement)

Scott Alexander (Evaluator for Saguache and Baca Crestone Emergency Medical Service)

Jon Montano (Evaluator for Center Emergency Medical Services)

- Fire and Law Enforcement were located in the main meeting room of the Saguache Community Center.
- As the exercise progressed, the close proximity of participants created too much noise.

Treat Suomi (Evaluator for Center Volunteer Fire Department)

- Center Fire was able to contact Law Enforcement personnel on MAC 15 SW. Purpose of the call was to perform a radio check.

Wes Moores (Evaluator for Saguache, Villa Grove, Baca Grande and Crestone Volunteer Fire Department)

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- There was some confusion regarding sending a representative to the Incident Commander in order to form a Unified Command.
- Once Fire responders went to MAC 14 SW to communication and coordinate with the Unified Command, communication went much better.
- As the exercise progressed, Villa Grove demonstrated their ability to give good clear communication; acknowledge receipt of messages; and followed DTR protocols.

Pam Stewart (Evaluator for Center Police Dispatch Center)

Center Police Dispatch Center is primarily a one man station. Center Dispatch also houses the secondary Public Service Answering Point (PSAP) equipment for the San Luis Valley 911 system.

Center Dispatch has 2 consolettes and one additional mobile radio in their center. They were able to monitor the traffic going over Saguache Mac and had a pretty good idea of what was going on.

Center Dispatch received a call for Fire/EMS assistance and paged in a timely manner. After the page was sent the dispatcher was unable remember what specific equipment was needed. She did a good job of calling Saguache Sheriff Dispatch Center back to confirm what they needed.

I would recommend the Center Police Department Dispatch Center have some sort of recording device. Dispatch had no way of recalling any traffic if they did not get it the first time.

Dispatch was very timely on getting equipment that was requested. The Dispatcher wrote everything down so she was able to go back and do a log sheet based on her written information.

They did receive a real world 911 request for an ambulance and had trouble getting an ambulance to run. There was a delay in making the decision to call Monte Vista to have them respond. Dispatch used the radio to call Monte Vista to call for assistance instead of the phone which I thought was great because it gave the volunteers that may be listening a heads up.

For a one person Dispatch Center, Bernadette Arellano did a very good job. I would recommend that they look in to some type of recorder for the radio traffic. I would also recommend that they have some sort of policy in place if after a set amount of time if they do not have a response from the Center Fire and or Ambulance that they call and adjacent agency for assistance. The time frame for the real world ambulance call was quite extensive.

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Mike Norris (Evaluator for Saguache County Sheriff's Dispatch Center)

- All responders were able to switch to their SIMPLEX channel or MAC 15 SW to coordinate communications and activities. In the past, some responders tended to stay on their dispatch channel to coordinate activities with other responders. This caused congestion on the radio and made it difficult for dispatch to perform their functions.
- Dispatch needs to insure they can contact ARCC by DTR radio, not the telephone.
- Dispatch simulated activating the Emergency Preparedness Network (similar to "reverse 911") to notify resident of danger. Dispatch also notified the Incident Commander the EPN had been activated (simulation).
- Several dispatch employees practiced contacting Colorado Department of Emergency Management on MAC 9 Southeast (SE).

Mark Werts (Evaluator for Incident Command)

- Deputy Kyl Torr did a great job as Incident Commander. He was essentially thrown into this position with no warning, but managed to pull things together as the exercise progressed.
- The Saguache County Emergency Manager was never notified of this event.
- The Unified Command structure was slow to come together.

Kenric Holman (Evaluator for Monte Vista Police Dispatch Center)

Barbara Robbins (Evaluator for Red Cross)

Lawrence Martin (Evaluator for Hazardous Materials)

- This exercise went smother than most.

Summary of the "Hot Wash" debriefing from Kimberly Bryant

Exercise participants were, for the most part, very pleased with the chance to use their DTR radios in a coordinated fashion. This has been a point of frustration for many emergency responders.

Exercise participants were asked to complete an eight question critique form. We received 18 critiques. Participants were asked the question, "Please rate the overall exercise on the following scale [1 being least and 10 being best] and the participants gave the exercise an average rating of 7.4, which shows they were pleased.

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During exercises, make sure everyone has a chance to use the DTR radios.

Participants should periodically announce “this is an exercise message” over their DTR radio. Several responders, not a part of the exercise, thought an actual emergency was occurring and started to respond to Highway 17 and County Road “T”.

REPEATING COMMUNICATIONS:

People did not consistently repeat communications back.

There was a major mistake made in the announcement of the wind direction: It was reported to be “NE wind, coming from the north east” when the actual injection was a SE wind. A SE Wind is actually wind coming from the SE.

DISPATCH:

- When Alamosa dispatch paged out Baca Grande Fire they used the tactical channels, not ARCC5.
- After incident communications switches to the MAC channel, dispatch should direct all additional arriving units directly to the staging area. The arrival briefing will be held by the staging area staff and will include radio frequency information.

INCIDENT COMMAND:

The IC needed to appoint an evacuation officer to coordinate a search. The IC needs to recognize when they are getting too busy, THAT is when to expand ICS and appoint more section leaders. This could have happened very soon after the incident got started. Appoint Fire, EMS and Traffic SECTIONS, Then add Hazmat and evacuation when those operations started. (And then, the evacuation section leader would appoint DIVISIONS to evacuate specific areas.)

At this time you would also want a Communications person next to you making a communications plan (a one page document showing who is on what channel)

Use the white board to draw the Incident Command chart as it unfolds.

The County EOM was not notified. The IC should call the EOM through the Sheriff’s office dispatch. Notify the county Emergency Operations Manager when there are:

- Any hazmat incidents over five gallons
- Potential evacuations or Mass care situations
- Any disaster so large that we obviously will need state or federal intervention

IC needs to scan dispatch channels and use the MAC channel as the Command channel. (The IC had to raise the section leader on the working channel, which caused serious delays – example, when calling hazmat to see if the fire fighters could remove their breathing apparatus.)

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SECTION LEADERS (All the people in Unified Command besides the IC):

Fire Operations: Use your VHF FERN channels and local channels if additional work channels are needed.

The section leaders need to break into the chatter when they have an emergency message, such as updated evacuation information. They should say “Break for an emergency message” twice and then give the announcement twice. Use pen and paper to keep track of your crews and other resources, and evacuation routes.

Use local tactical channels to isolate communications for operations and traffic control

If needed, use your VHF radio to communicate with air support for fire operations, and for NWS weather.

Section leaders need to scan the IC Channel (COUNTY MAC) as well as the simplex channel assigned to them. The front line only needs to listen to their crews’ working channel (except for the crew leaders who also scan or the simplex).

Section leaders need to get confirmation from every unit for important messages. Some messages were repeated with incorrect information and these errors were not corrected. Listening to your crew leaders is important for their safety!

BASIC FUNCTIONALITY:

Everyone needs to pause for a second after the radio is keyed BEFORE speaking. Otherwise the person you are calling cannot hear you calling.

People used the wrong channels to communicate.

Sometimes the radios don’t work inside buildings (especially metal buildings).

New arriving units should report they are on-scene to their own dispatch and then change to the MAC or Simplex. Then they check in with the IC and with the Staging Area Manager if there is one. Operations should NOT begin until your unit receives an assignment by the IC or the Operations Section.

GENERAL COMMENTS:

Doug Davie, Rio Grande County Commissioner - People learned a lot about how to use their radios and it was noisy in the main room of the Saguache Community Center.

Captain Martin – Evaluator for Hazardous Materials: This exercise went better than most. Even though we had frequency issues with people using the wrong channels. It was good when the IC moved everyone to the simplex channels where they were

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supposed to be anyway. When Alamosa dispatch was notified of the incident, they automatically called Hazmat, so the inject calling in the hazmat team didn't make sense. The IC is supposed to tell Dispatch to call in the hazmat crews (Usually both CSP and SLV Hazmat will both come, but CSP "owns" incidents on highways.)

Charlie Warren, member of Baca Grande Volunteer Fire Department: Baca Grande Fire and Crestone Fire never got paged out. Someone said to put us on standby originally, but that was never done.

Scott Alexander – Evaluator for Saguache and Baca Crestone Emergency Medical Services: People didn't stick to the protocols. Should people ad lib as part of the exercise? Or stick to the script?

Pam Stewart – Evaluator for Center Police Dispatch Center: The purpose of the exercise was to highlight the protocols and for people to discover why we have the protocols.

Melinda Lopez – Controller for Saguache and Baca Crestone Emergency Medical Service: Clearer instructions of what to do during the exercise would have helped.

Treat Suomi – Evaluator for Center Volunteer Fire Department: Learn the DTR protocols and implement them in your department. The use of ICS is a critical component in making the communications work. We must all know how to use ICS, especially in large mutual aid incidents. This exercise had more problems before the IC instituted Unified command. We need to know how to expand and collapse ICS as the incident unfolds. Remember your span of control is 3 to 7 only! Take these messages back to your departments.

Kenric Holman – Controller for Saguache County Sheriff Dispatch Center: The Saguache County Sheriff's Deputy, Kyl Torr wasn't expecting to be IC. It was much harder than he thought. Even after everything was delegated to Section leaders the radio was busy.

Jim Felmler – Controller for Center Volunteer Fire Department: The exercise worked smoother once we got fire departments and Emergency Medical Services to their own work channels.

Mike Norris – Evaluator for Saguache County Sheriff Dispatch Center: There was a cluster in dispatch. The SO dispatched some by radio and some by telephone. The sooner we can get the operations groups off the MAC channels and onto the talk-around channel, the better. Then dispatch talks to the Incident Commander only... as it should be.

Jose Chacon, member of Center Police Department: This exercise eventually ran smoothly. At first, they didn't know what channel they were supposed to be on. Center PD and Saguache SO had to switch back and forth.

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Wes Moores – Evaluator for Saguache, Baca Grande, Villa Grove and Crestone Volunteer Fire Departments: The DTR and VHF protocols are different. We need to adjust the VHF protocols so we are used to working with them when we have to use the DTRs. When do we use SAGMAC, when do use our VHF? Everyone wants to report back to dispatch but once we go to a MAC (in the county the incident is in) or a work channel then we stop informing dispatch of every move. Check in with the IC or Staging Area Manager at the incident.

Scott Morrell – Controller for Center Police Department Dispatch Center: Get the incident pulled out of dispatch as soon as possible.

Gary Thomas – Controller for Incident Command: It takes a while to get used to the DTRs – keep practicing. His compliments to Deputy Kyl Torr; once he separated his teams he took control and calmed down. He was the first person that he’s observed go to outside resources for what he needed (the 24” pipe wrench and a tow vehicle for a tractor). Know your local resources. “I’m really impressed with today’s exercise.”

Jeff Babcock, Regional Homeland Security Coordinator: Thank you very much for coming, this took months of planning. Thanks especially to Dave Pote, and he still has work to do.

Written comments from exercise participants follow:

“I was part of the Unified Command and worked out of the Incident Command Vehicle. I learned so much about DTR communications and using different DTR channels.”

“I was not clear where the staging point was located. Baca never got paged. We entered the exercise later using SAGMAC. We got our first job at 1145 hours. Where was the “community building” in Moffat. There is no such building in Moffat.”

“The scenario was very realistic...until the end with the bomb.”

“We now know that channel to use during multi-agency responses.”

“Poor DTR communications from the Incident Commander and ambulance base in Saguache. Some injects were given early. Controllers could push injects and Incident Commander more rapidly. Communications within the Unified Command were late in getting established.”

Incident Commander had already moved all Fire units before Baca Crestone got the initial page. We had to monitor our dispatch channel.”

“Go over DTR radio information in more detail, especially for the newer employees.”

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Recommendations

Training needs

Emergency responders need more Incident Command System (ICS) training, beginning with ICS-100. This is especially true for those who will have a leadership role during emergencies or disasters.

Conduct more DTR radio exercises around the San Luis Valley. Expose as many emergency responders to the DTR radio protocols as possible.

Emergency responder agencies should include DTR radio training and use of the SLV DTR Protocols during periodic in-service training sessions.

Equipment needs

The Center Police Department Dispatch Center should acquire equipment that will allow dispatchers to record telephone and radio traffic.

Changes in the Emergency Plan

The Saguache County Emergency Manager should consider adding the DTR radio protocols to their County Emergency Plans.

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Improvement Plan Matrix for Saguache County Public Safety Agencies

TASKS	RECOMMENDATIONS	IMPROVEMENT ACTIONS	RESPONSIBLE PARTY/ AGENCY	COMPLETION DATE
First responders need to attend INCIDENT COMMAND SYSTEM training for managing incidents during emergencies.	Managers of first responder agencies should insure all personnel who would respond to an emergency or disaster scene attend awareness training for managing incidents. Evaluators should follow up with agencies within their respective discipline to endure training is completed.	All first responders should attend Incident Command System (ICS) ICS-100 training.	Law Enforcement/Robert Jackson Fire Departments/Wes Mores and Treat Suomi Emergency Medical Services/Jon Montano and Scott Alexander Incident Command/Mark Werts Saguache County Sheriff Dispatch Center/Sheriff Mike Norris Center Police Department Dispatch Center/Pam Stewart	December 31, 2007
First responder agencies should become more familiar with the Digital Trunk Radio (DTR) system.	First responders should become more familiar with the interoperable communications capability available with DTR radios. Evaluators should follow up with agencies within their respective discipline to endure training is completed.	First responder agencies should include practice sessions using DTR radios and the DTR radio protocols during regular in-service training meetings.	Law Enforcement/Robert Jackson Fire Departments/Wes Mores and Treat Suomi Emergency Medical Services/Jon Montano and Scott Alexander Incident Command/Mark Werts Saguache County Sheriff Dispatch Center/Sheriff Mike Norris Center Police Department Dispatch Center/Pam Stewart	December 31, 2007
First responders should become more familiar with terrorist bombings and improvised explosive devices.	First responders should become more familiar with terrorist bombing concepts and how to recognize improvised explosive devices (IED). Evaluators should follow up with agencies within their respective discipline to endure training is completed.	First responders should attend: a. Incident Response to Terrorist Bombings b. Prevention and Response to Suicide Bombing Incidents c. Understanding and Planning for School Bomb Incidents	Law Enforcement/Robert Jackson Fire Departments/Wes Mores and Treat Suomi Emergency Medical Services/Jon Montano and Scott Alexander Incident Command/Mark Werts Saguache County Sheriff Dispatch Center/Sheriff Mike Norris Center Police Department Dispatch Center/Pam Stewart	December 31, 2007
Center Police Dispatch Center should acquire the ability to record telephone and radio traffic.	Apply for grant funding to purchase needed equipment.	Purchase and install recording equipment for telephone and radio traffic/	Center Police Department Dispatch Center/Pam Stewart	July 31, 2008