After Action Report

DATE: 8 June, 2009

SUBJECT: After Action Report – DICE 09

FROM: Robert Hollister, Cochise County RACES/ARES Coordinator
TO: Mike Evans, CC Emergency Services
CC: Local Emergency Planning Committee
RACES Team
NORTHCOM
JITC

1. PURPOSE: This report briefly describes the support provided by the Cochise County RACES/ARES Communications team during participation in the Department of Defense Interoperability Communications Exercise (DICE) 09. It further describes the activities of the team while using the Cochise County Mobile Communications Unit (MCU) during this exercise.

2. EXECUTIVE SUMMARY: DICE 09 was part of a multi-state communications exercise coordinated by the Department of Homeland Security (DHS) and United States Northern Command (USNORTHCOM), the joint military command responsible for homeland defense and support to civil authorities across North America. The exercise was sponsored by NORTHCOM and hosted by the Joint Interoperability Test Center (JITC) at Fort Huachuca during the period 16-18 June 2009. The main objective of the exercise was to test communications including radio, data (internet) and satellite. Exercise participants included military units and civil emergency response agencies from Arizona, North Carolina, Texas, and New Jersey. DICE participation provides a great opportunity for emergency responders from city, county, state, federal, and military agencies to work out procedures and protocols to be used during emergencies.

The scenario this year focused primarily on a weather event but included a simulated terrorist attack. The RACES/ARES team was given designated items off the Master Scenario Event List (MSEL) to play against. We modified these items to fit local conditions to insure that sufficient outside resources were justified to bump the response up to the appropriate level and ensure the Governor would need to declare a state of emergency for Arizona. Starting with notional Hurricane Sally, inserting a simulated pipe bomb on a chlorine tank at one point for a HAZMAT flavor, and terminating with a small nuclear explosion at a local Wal-Mart the play continued for three days.

Our participation included deploying the Cochise County Mobile Communications Unit to the Joint Interoperability Text Center at Fort Huachuca.

3. TRAINING OBJECTIVES: Our primary training objectives were to conduct training of RACES/ARES personnel in use of the MCU equipment and systems as well as to practice procedures from the County Emergency Plan that we would use while working

with AZ State Department of Emergency Management and the state Emergency Operations Center (EOC) during an all-hazards incident.

Specific MCU systems tested were:

- High Frequency (HF) radio voice and data
- Very High Frequency (VHF) radio voice and data
- Satellite Internet data and VOIP telephone.

4. OBSERVATIONS

a. Exercise Operations –

(1) HISN - This year the scenario was provided by NORTHCOM using a MESL in a spreadsheet format. This data was resident on the Homeland Security Information Network (HSIN) accessible via the Internet. The HSIN provides a method of distributing Sensitive But Unclassified (SBU) information to appropriate agencies. Access to the HSIN account had not been set up for Cochise County prior to the initiation of the exercise. Unfortunately this caused a delay in receipt of the MESL so that our play could not start according to the schedule. Once this issue was identified it was quickly resolved by the NORTHCOM staff. Day one information was then sent directly by email to the players and the exercise play began in earnest. On subsequent days the information was available on the web when needed.

(2) Use of ICS Forms – The ICS Communications Log (ICS 309) was used again to keep track of our activities. This continues to be a great tool to maintain track of report serialization as well as general activities during the day. Likewise, we used the ICS 205 to document our frequency assignments for the exercise.

b. MCU Specific

(1) Equipment Load - We have had our truck a little over three years now and we continue to accumulating "stuff". It is time for a good clean out, sort, and repack. Some of the gear that we have not used in the past year we should probably be removed from the vehicle. A small area in the Lock-up storage should be designated for MCU storage to keep those items in well-labeled boxes to grab when we need them. During initial setup it was determined that the MCU really could use a heavier sledge hammer to drive in the antenna stakes. The 4-lb hammer currently on board is just not enough when working in hard ground. Fortunately one of the JITC staff loaned us a heavier one during setup. Much appreciated.

(2) VOIP – While setting up to test the Voice Over Internet Protocol (VOIP) phone link we were unable to obtain a dial tone. There seems to be a problem with the equipment/configuration in the County switch that integrates our circuit into the County phone system.

(3) Laptop Computer Configuration - While setting up the replacement laptop computer it was determined the SOFTROS license had not been installed. That was fixed. We are still having a problem controlling the mast camera from the laptop.

(4) Message Handling - Our Winlink 2000 network equipment continues to work very well. Many of our Situation Reports (SITREPS) were sent out using the amateur

radio hosted Winlink network during this exercise. Several of our operators received some great hands-on training using this system. We also successfully used the satellite based Internet E-mail for message handling. Most of the traffic handling was done using one or the other of the two data systems. Voice was used on amateur voice (HF & VHF) as well as the VHF DEMA Radio Network (DRN) for coordination and Flash Traffic.

(5) DRN Operations – One of our goals for this event was to test and use the DEMA VHF Radio Network. It had recently been upgraded to the narrow band standard, but we had not used it to support an exercise since that happened. Day one and two audio from the AZ mobile unit (aka Bullfrog) was readable but not very good at out location. By day three the Bullfrog crew had replaced their radio and audio quality jumped to "Loud & Clear" at our location. It is certainly a very viable option for both mobile and fixed base operations.

5. GENERAL COMMENTS

a. The "distributed network" concept with players scattered across the US seems to have worked well. We may not have had to deploy to Ft Huachuca this year to make this work. Next year we may be able to test our concepts/protocols from our base station in Sierra Vista and not need to deploy to Fort Huachuca.

b. Despite the initial glitches on Day One, I feel our participation in the exercise was very successful. Anytime we can work with other government and first responder counterparts to test our equipment and practice our communications skills is great training. Meeting and working with the various players and agencies in exercises such as this also builds and integrates the cohesive working relationships that are required during actual incidents. I think we all walked away with a better understanding of what is required to succeed under difficult conditions. I certainly want to thank our hosts at the JITC on Fort Huachuca as well as the players at the various "far-ends" of the communications pipe as we worked through the exercise.

6. ACTION ITEMS

- Schedule a clean up day to sort and clear unused items out of MCU.
- Coordinate with Cochise County IT Department to resolve the VOIP satellite phone system issue.
- Procure a 6-8 # sledgehammer for the Antenna kit bag.

Appendix A – Participating Agencies/Personnel

AZ State Department of Emergency Management
Cochise County Emergency Services
Cochise County Emergency Services RACES/ARES Team
Tempe Fire Department

Cochise County Emergency Services
Elizabeth Philhower

Cochise County RACES/ARES Team Members
David Bly, N7DTB/AAR9AH
Charles Campbell K4AFN
Dale Chidester NJ7C
Pablo Duarte KE7FPP
Vince Fero AA7JB
Bob Hollister N7INK/AAR9KK
Lee Ilse KD7OED
RB Rice K7HVV
Pat Thies KD7HAB/AAR9KO
Ev Wittig WB7VNF

Appendix B

DICE 09 Exercise Plan

Purpose: The purpose of this emergency management exercise is to test and evaluate the communications interoperability of the Cochise County Mobile Communications Unit during the DoD Interoperability Communications Exercise 09 with the following emergency response agencies:

NORTHCOM Joint Task Force
AZ Department of Emergency Management
Cochise County Sheriff's Office EOC
Military Affiliate Radio System (MARS) network
National Communications System Shared Resources (SHARES)
EOC, Charleston, South Carolina

The exercise will simulate a severe weather incident causing major damage to the county communications infrastructure and thereby test the communications and procedures of the County Emergency Response Plan. The exercise will assist in assessing the communications system capabilities organic to the County MCU and those systems available to the emergency responders and their ability to respond to a severe weather incident.

Specific systems to be tested include:

1) High Frequency Voice and Data
2) VHF Voice and Data
3) Satellite Internet data and VOIP telephone
4) DEMA Radio Network

A test matrix will be prepared identifying agencies and systems to assist in determining successful completion of test objectives. (Appendix 1)

The exercise will be conducted using the Incident Command System command and control structure and standard ICS forms and exercise the procedures identified in the Cochise County Emergency Response Plan.

Specific tests to be run Include:

1) Test HF Voice communications interoperability with participating agencies by establishing a voice link and successfully relay information:
   AZ Department of Emergency Management Communications Van
   Cochise County Sheriff's Office EOC
   Military Affiliate Radio System (MARS) network
   EOC, Charleston, South Carolina
   National Communications System Shared Resources (SHARES)

2) Test HF Data System by:
   Successful transmission/connection with Winlink 2000 network
      Exchange HF Email messages with:
         CCSO
         MARS Office, Ft Huachuca

Other DICE participants

3) Test VHF Voice communications interoperability
Establish local VHF network with participating public service agencies

4) Test TRACSTAR Satellite communications system by:
Establish a VOIP link with Cochise County Telephone Network
Establish Internet connectivity for sending and receiving email and access to specific Internet sites.

Appendix C – Test Completions Matrix

Mode	Objective	Completed Yes/No
HF Voice	AZ MARS	Yes
" "	AZ State Bullfrog	Yes
" "	SC EOC	No - Comment 1
" "	SHARES – National	Yes
" "	SHARES - Regional	Yes
VHF Voice	DRN to State EOC	Yes
" "	Amateur to State EOC	Yes
HF Data (Winlink)	AZ State Bullfrog	Yes
Satellite Connectivity	Data	Yes
	VOIP	No – Comment 2
	Photo Transfer	Yes – Comment 3

Comment 1 – Attempted to establish voice contact on 14.270 on Day 1 but did not hear SC EOC. Sent E-mail to POC but never got a response.

Comment 2 – County IT Tech determined there was problem at county switch and he will investigate.

Comment 3 – A photo was taken by camera phone, sent to the MCU Internet address and forwarded to the AZ Bullfrog, NORTHCOM JTF Commander, and uploaded to the HSIN website.