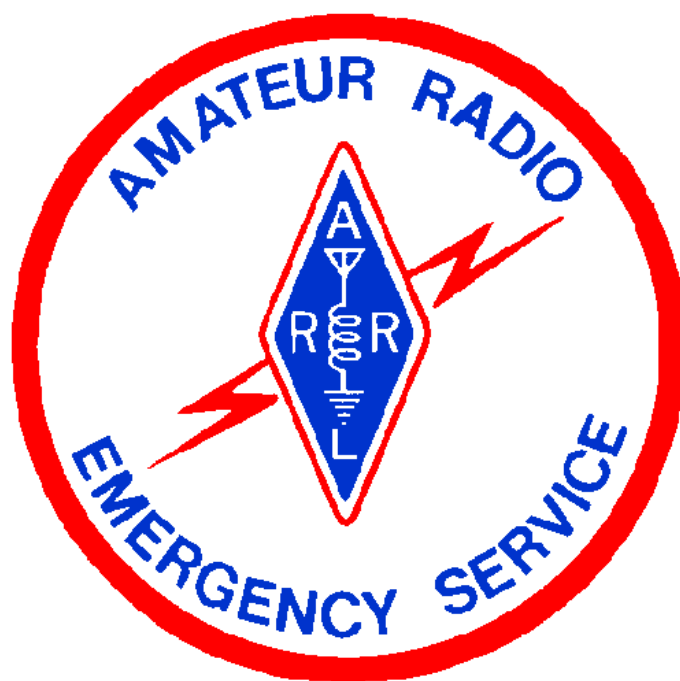


**ARES® Simulated Emergency Test  
After Action Report  
October 10, 2015**



**William Grimsbo (N0PNP)  
EC, St. Charles County ARES®**

## Contents

<b>After Action Report – Simulated Emergency Test 2015</b>	<b>3</b>
<b>Introduction</b>	<b>3</b>
<b>Scenario</b>	<b>3</b>
<b>Execution</b>	<b>5</b>
<b>Lessons Learned</b>	<b>6</b>
<b>Exercise Scenario</b>	<b>8</b>
<b>Exercise Injects</b>	<b>12</b>
<b>Safety Briefing</b>	<b>13</b>
<b>Damage Assessment Reports</b>	<b>14</b>
<b>Triage Log</b>	<b>15</b>
<b>Participant List</b>	<b>16</b>
<b>Modified Incident Communications Plan (ICS-205)</b>	<b>17</b>
<b>Radio Traffic Logs</b>	<b>18</b>

**Introduction:**

Simulated Emergency Test 2015 was an attempt to bring two volunteer entities together to show each the value of the other in response to an emergency. The two entities are Community Emergency Response Teams (CERT) and the Amateur Radio Emergency Service (ARES®). The intent was to fill a gap in the standard CERT training in the area of communications. Many CERT volunteers are amateur radio operators as well but the idea of bringing the two entities together was to show the value of a united force under an Incident Command structure with a radio net to support the teams and to request resources as required.



A local hospital was also involved with the exercise. A list of needed supplies was sent to the hospital via packet radio and there were two nets in progress, one with the responding teams and one with the EOCs and hospitals. This also provided an opportunity to roll out St. Charles County's latest asset – a new communications trailer with three amateur radio operating

positions (two are dual band mobile radios and one is a IC-706 Mk.2 to cover HF). There are also 800 MHz and high-band VHF digital trunking radios in the trailer and a wireless internet system is coming. This trailer started life as a tow vehicle for a DARE robot and was professionally converted with desks, windows and an air conditioner/heater unit and LED ceiling lighting to make the trailer useable as a communications center.



The St. Charles County Division of Emergency Management (DEM) had the unit converted and ARES® volunteers rewired the trailer for 120VAC and installed radios and under-shelf LED lighting with a radio controlled dimmer. DEM also had decals put on the trailer including those of the Emergency Communications Association (ECA) of St. Charles County (the sponsoring organization for ARES® in St. Charles County).

**Scenario:**

The scenario involved a severe thunderstorm with 70 mph winds that had caused significant damage to several

structures, roofs, etc and resulted in numerous injuries, power outages and debris.



The exercise moulage started at 0800 on the morning of 10 October 2015 and the exercise itself began around 0900 with a page from the trailer to the volunteers. The exercise briefing was at 0930 and the exercise began in earnest at 0930.

This exercise was the first time we tried moulage (molding and makeup) for victims. Since those performing the moulage were amateurs, the results may not have been as good as they could have been but it was a good first try.

There were three activities aimed at different aspects of the CERT training enhanced by ARES® participation. The Search and Rescue (SAR) section involved search of a building with five victims placed at various positions inside. The CERT team was to assess the injuries, treat as appropriate on site and remove to triage for further assessment and treatment. The teams were able to communicate with Command and Triage while in the building to prepare triage for the victims and seek advice from Command on conditions, injuries and movement.



The Rapid Damage Assessment team was to perform windshield damage assessment of houses in the exercise area, keeping in contact with Command and reporting any significant damage to pass along to NWS.



The Triage Team was to set up and manage triage operations, contacting Command/Logistics for supplies as needed and requesting ambulances as required.



Each team had an opportunity to play in each of the exercise scenarios by rotating all teams through each section. The NCO team was maintained through-out the exercise for consistency.

**Execution:**

Anyone that has ever planned and executed an exercise knows that regardless of the planning, Murphy is in charge. Anything that can go wrong will go wrong. This one was no different. Most of the CERT teams invited to participate either did not respond or cancelled at the last moment, making it very hard to properly man teams and carry out the training. Many of the hams came with only their handhelds in hand, no hardhats, gloves or other equipment that most of us in this business carry around in our cars. Fortunately, the writer had six hard hats in his kit (just in case this very thing happened). There were enough CERT volunteers on hand to have one or two with every team (about 10 cancelled at the last minute) making the CERT presence less than fully effective. Fortunately, some of the hams had CERT training and were able to step in (although not fully prepared). We quickly ran out of supplies such as bandages, dressings, etc. making the job at triage almost unmanageable. Fortunately, there were a few CERT folks willing to do the best they could to make a bad situation work.



Communications had its own set of issues including desense, too much noise, diesel fumes from the generator, lack of training on the computer logging tools and packet system. All of these things considered, the communications team did an outstanding job considering the circumstances. Apparently, after the start of the exercise, the wind shifted to the South or picked up speed causing the exhaust of the 10 KW diesel generator to blow in to the trailer.



Windows were opened to prevent build-up of dangerous gasses and it seemed to mitigate the problem. There was desensitization of the radios by other radios in the trailer since all communications was by VHF. The original intent was to run the SAR and local net on UHF, the EOC/Hospital net on VHF and the occasional packet message on VHF but some of the hams did

not have dual-band handheld radios (hard to believe these days but true). Regardless of these difficulties, the communications team did an excellent job

The SAR exercise went reasonably well with varying degrees of knowledge and varying results (which is to be expected in any exercise). And the damage assessment was completed successfully with the exception that there was no computer logging due to the training issue mentioned earlier.



**Lessons Learned:**

Although it seems like common sense that in an emergency, anyone could be put on any team any place to provide communications, obviously people do not think that way naturally. Future ARES® training on grab-and-go kits will include the standard personal protective equipment (hardhat, gloves, vest, boots, nitrile gloves, dust mask, first-aid supplies) as part of the kit in addition to the normal radio-related equipment.



Attempting to run two voice nets and packet from a relatively small area requires use of headphones and good timing. Although headphones were available, those manning the trailer did not know where they were. Also, training on the trailer systems is needed to acquaint all potential operators with its use. In the future, training on all systems on the trailer will be provided.



It is good to monitor the political situation in the county prior to attempting an exercise requiring participation by other groups. Particularly if they are affiliated with other political entities that could be changed by elections or other forms of political upheaval which could adversely affect participation.

The FEMA and SEMA databases for CERT are out of date and much of the contact

information has changed. The teams and Emergency Management entities have apparently not kept the databases up to date, resulting in no contact with several teams in the county.

Too much of this exercise prep was done at the last moment due to some changes in venue and poor coordination on the writer's part. In the future, coordination will begin in January for the October exercise to allow adequate time for complete planning and coordination.



At triage, there should be a person responsible for managing supplies and ordering of the triage by injury. This person should be capable of providing the NCO with a list of required materials and to provide the NCO a list of injuries to communicate to EMS by severity. Forms should be made available for ARES® kits to ensure that at least the paperwork will be available.



All things considered, the teams performed well under the circumstances. A similar exercise may be planned in the future depending on the political and financial climates in St. Charles County. Special thanks go out to St. Charles County Police Department and the Division of Emergency Management for providing its volunteers the communications trailer, facilities for the exercise and the lunch for the hot wash. ARES® and ECA appreciate their cooperation and assistance.

### Exercise Scenario

**Exercise Name:**            **Operation Last Minute**

#### **Scenario:**

A severe thunderstorm with over 70 mph straight line winds, hail and heavy cloud-to-ground lightning has hit the area and caused significant damage to several areas in the county. Power is out to much of the area, several buildings and roofs have been damaged. CERT teams have been called up to survey damage and perform light search and rescue operations. ARES has been requested by Emergency Management to provide communications resources and coordinate operations:

- Injects
  - 8 to 10 per hour
  - Addressing infrastructure issues, fires, structure damage
  - SAR and Triage operations
  - Hospital coordination

State Emergency Management is requesting damage assessment information from all affected areas in St. Charles County. Some roads have limited access due to flash-flooding and the potential for more storms is still high. ARES teams have been requested to provide field communications support for damage assessment and rescue efforts in affected areas due to the number of people affected. ARES will establish communications with CERT and will collect damage assessment reports from teams in the field.

#### **Role of Amateur Radio Operators**

- Regional communications linked by microwave may not function
  - EOCs may be out of contact with county and regional centers
  - Unable to contact Fire, EMS and Law Enforcement



- Fire, EMS and Law Enforcement overloaded due to the magnitude of the event
- Alternate systems may be required
  - No-one does alternate like Amateur Radio does alternate
  - AR may be called upon to provide communications between CERTs, EOC and hospitals
- Amateurs bring their own systems
  - Portable power and communications systems
  - Self-imposed conservation of resources
  - Local and regional communications
  - Critical contact with other agencies

**Exercise Timeline:**

Moulage starting at 0800 hrs

Page out takes place at 0900 hrs

Staging at County Garage

Teams at staging by 0930 hrs

EOC Opened by 1000 hrs

Exercise terminated 1200 hrs

**Objectives:**

Purpose/Objectives

1. Provide Emergency Communications at a forward base and Emergency Operations Centers
2. Operation off the main power systems

3. Operation in accordance with County EOP
4. Operation in accordance with ARES EOP
5. Orderly nets with properly handled traffic
  - i. All traffic logged
  - ii. Damage assessment reports properly documented and logged
6. Demonstrate appropriate staffing levels at each location

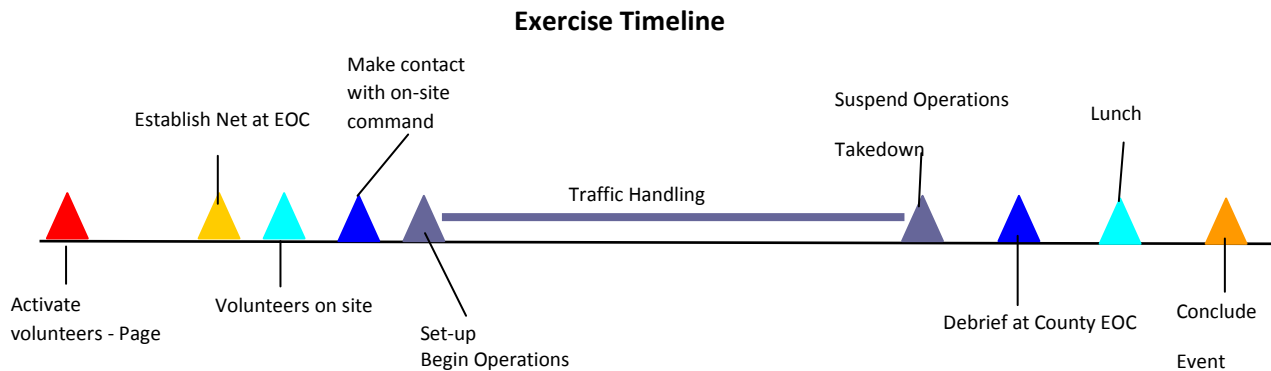
**Tools:**

Traffic logging – QLOG5 at EOC and forward base

Damage Assessment Logging - Incident Commander – At forward base staging for managing volunteers and logging damage assessment reports

**Exercise Timeline**

The following diagram represents the timeline for the exercise. The total duration of the exercise, including debrief, is six hours. Activation will be by voice page at 0800 CT and the exercise will conclude with a debrief/lunch at a destination that is TBD.



## **Exercise Evaluation**

The exercise will be evaluated in accordance with the appended worksheet. The following will be evaluated as a minimum with respect to the exercise objectives:

- Response times
- Response protocol
- Set-up times
- Coordination of communications
- CERT coordination
- Interagency coordination
- Traffic accuracy/logging

The worksheet will be completed by each participating agency and results will be averaged to determine areas for overall improvement. Areas for improvement will be the subject of future exercises and training. Comments should not address performance of specific individuals but should address protocols, response and other issues directly related to the objectives of the exercise.

## Exercise Injects

See Attached File: **Injects.pdf**



Injects.pdf

## Safety Briefing

### **Operation Last Minute Safety Briefing**

#### **Site Safety**

Prior to erecting a portable shelter, look overhead and to a radius around the shelter adequate to ensure the shelter will not be hit by falling debris if surrounding buildings should collapse. Mark any cables on the shelter, trailer, etc. with fluorescent tape for visibility (tie off and leave a tail that is at least six inches in length). Ensure the cables do not create a trip-hazard or a choke hazard.

#### **Weather**

Do not construct an antenna, push-up pole or shelter if there is lightning or thunderstorm activity within ten miles of the site. If a storm develops, disconnect all radio equipment if it is safe to do so, secure any portable structures and take shelter immediately.

#### **Road Safety**

This is an exercise, hence no one is authorized to exceed the speed limit or in any other way break traffic laws. Safety of the responders is always a key element to response. Always ensure personal safety in traveling to and from exercise locations. No responder is authorized to use flashing lights or sirens as part of this exercise.

#### **Team Safety**

Each SAR and Triage team shall consist of three to four individuals. One of the three shall be assigned as the safety officer for the team. This individual shall survey the site and activities carried out there to identify safety hazards and offer recommendations to the team leader to mitigate the safety risks. Team safety is the responsibility of each team member. Teams responding to hospitals or other facilities shall consist of at least two individuals.

#### **Public Safety**

Safety of the general public is paramount. Public safety must be considered in all operations including vehicle movement, shelter construction, antenna construction and operations. Do not perform any act that could endanger the public in any way.

## Damage Assessment Reports

See attached files:



DAR Team  
1-p1\_NEW.pdf



DAR Team  
2-p1\_NEW.pdf



DAR Team3 -  
p1\_NEW.pdf

## Triage Log

### COMMUNITY EMERGENCY RESPONSE TEAM CERT FORMS

#### Victim Treatment Area Record

TEAM 1

Shirley  
Christine

Date:	Person Reporting:	Name of Description	Triage Tag	Condition	How Inj.	Page #:	Time Out
0750	SAE	GREEN	GREEN	SKINSED			
0900	ARIEL	YELLOW	YELLOW	Cut on face			
9:55	RHANNON	YELLOW	YELLOW	ARM WOUND			
9:58	TAYLOR	YELLOW	YELLOW	ARM FRIED			
10:00	JAMES	RED	RED	SITLOCK			
10:05	WILL	RED	RED	UNCONS.			
10:15	PATRICE	YELLOW	YELLOW	COMPOUND FRACTURE			
10:17	JOAN	GREEN	GREEN	BRUISED ARM			

1008001

www.jed-hs.com

FOR MEDICAL TREATMENT AREA

Document each person brought to the treatment area. If victim cannot give name, write a brief description, e.g., sex, approximate age, hair color, race, etc.  
Tag color: red=immediate, yellow=delayed, green=minor, black=DEAD.

**Participant List**

<b>Last Name</b>	<b>First Name</b>	<b>Call Sign</b>	<b>Participation</b>
Underdown	Jay	W0PS	EOC
Young	Jeff	KB3HF	EOC
Grimsbo	William	N0PNP	Exercise Director
Scott	Roy	KB0PNR	Participant
Cave	George	W4MWX	Photography
Ault	Wayne	WD6EZQ	NCO
Aylsworthy	Lon	N/A	Participant
Cash	Christy	N/A	Victim
Collins	Dave	AD0IY	Participant
Konertz-Lee	Rita	N/A	Participant
King	Vincent	KD0JGB	Participant
Maninger	Michael	KC0GKN	Participant
Yoemans	Lily	N/A	Victim
Yoemans	James	N/A	Victim
Yoemans	Sue	N/A	Victim
Mendoza	Riannon	KE0BEQ	Victim
Taylor	Richard	N/A	Victim
Grimsbo	Joni	KC0MVH	Victim
Saint Juste	Wilnos	N/A	Victim
Jones	Lia	KD0UZU	Participant
Prinster	Bruce	KD0TSG	Participant
Denno	Gordon	AH6DA	Participant
Domina	Donald	KCODE	Participant
Martin	Raymond	K0WC	Participant
McCaine-Obenland	Ina	KC0KNT	Participant - DEM





## Radio Traffic Logs

### **Log of traffic between EOC and Lindenwood Command on 145.49 (that wasn't on a card)**

Amb to 1112 Lindenwood

Ambulance requested at 1115 Lindenwood for 1.

Ambulances are in route to local hospitals. St. Joe overloaded. Sending to BJC - St. Peters. ETA 5 min. (from EOC)

Message waiting from EOC in packet mailbox. (from EOC)

Please reply to packet message (from EOC)

Requesting gas and electric to 1107 Lindenwood to shut off utilities.

Requesting ETA on utilities.

ETA for gas is 20 mins and Electric is 10 min. (from EOC)

NOAA reports T-Storms moving into the county. Expect lightning and hail dmg with winds up to 35 mph. Sustained gusts up to 50 mph. reported in storm. (from EOC)

Requesting ambulance to triage for 1

Requesting ambulance to triage for 4 additional.

Requesting ambulance to 1115 Lindenwood

Requesting utilities to 1107 Lindenwood to shut off gas.

Local Net Log not retained by operator – Training note – All logs are to be retained as a record of the exercise and in the event of an actual emergency. Traffic logs are official records of the event and should be retained for liability reasons as well as a complete record of the event.