

St. Charles County ARES®
Simulated Emergency Test 2021
Report



Operation "Slight Breeze"
2 October 2021

Table of Contents

Section	Section Description	Page
1.0	Introduction	3
2.0	Simulated Emergency Test Attendance	3
3.0	Objectives	3
4.0	Scenario	3
5.0	Lessons Learned	4
Attachment A	Communications Log	5
Attachment B	SET 2021 Operations Manual	7
Attachment C	Paging Scripts	14
Attachment D	Safety Briefing	15

Exercise Report for Simulated Emergency Test (SET) 2021

1.0 Introduction

Simulated Emergency Test is an annual exercise sponsored by the American Radio Relay League (ARRL) and local Emergency Management, Fire Service or Law Enforcement served or partnering agencies. SET is an opportunity to demonstrate amateur capabilities to these agencies and work with them in an operational manner. SET objectives are established by the local Emergency Coordinator and served or partnering agency representatives.

2.0 Simulated Emergency Test Attendance

SET was run on 2 October 2021 and page out was at 0837. Participants arrived at staging around 0900.

The following amateurs checked in and arrived at staging:

Robert – N0PJX

Don – KZ8E

Wayne – WD6EZQ

Jeff – KB3HF

Brad – N0AQI – who also represented Regional Emergency Management

Ken – W0KAH

Bill – N0PNP

Ken (W0KAH) led the effort to assemble the communications trailer and make it ready for communications.

3.0 Objectives

Objectives to be met include the following:

- Accurate tactical messaging – Work is required to slow down sending speed
- Set-up and take-down of field base station - satisfied
- Understanding the use of tactical call-signs - satisfied
- Exercise layout by periods - satisfied
- Map reading and location finding without visible landmarks – satisfied

All objectives were exercised and lessons learned from each objective were noted.

4.0 Scenario

The scenario was as follows:

An EF 5 tornado has stricken St. Charles County leaving a path of destruction over a mile wide from New Melle to Boschertown (see attached map). Much of the area has blocked streets and most visible landmarks are gone. ECA is performing windshield damage assessment in the stricken area until

damage assessment teams are available to perform formal DA. Net control will be established at a remote location due to damage to radio towers at the County EOC. NCO must employ a means of routing units to locations without the use of visible landmarks and around blocked roads.

5.0 Lessons Learned

Several lessons came out of this exercise:

Trailer set-up:

1. It would be useful to have 90 degree coaxial connectors on the back of the dual band radio that is to the rear of the trailer to accommodate connection of the feed-line from the antenna on the push-up pole.
2. Connect mouse to computer at power up and wait for the drivers to properly load
3. Use of headphones in the busy NCO environment would make logging easier under some circumstances. They were available but not used.
4. Be aware that QLOG5 does generate alarms if emergency or priority traffic is logged. We need to be aware and know how to disable the alarms.

Net Control:

1. Never have fewer than two people at net control. Three to four that are familiar with operations is preferable.
2. Logging can be slow so ask operators to slow down their traffic. NCO is the traffic cop for the net.

Field Teams:

1. Field teams need to send traffic slower. They should never send faster than they can write it down.
2. Team 1 was not used due to attendance being less than required for the full exercise.

The exercise demonstrated good use of tactical call-signs and all operators made good use of the "DRILL TRAFFIC" at the end of the messages. The teams were able to find the correct locations and pass the tactical traffic effectively. The teams need to be aware of what constitutes emergency or priority traffic and include that in the messages to the NCO.

The NCO was very busy and having a logger at the station helped in aiding the NCO in getting the traffic as well as keeping an accurate log. Generally speaking, the messages were sent too fast as previously mentioned and it was suggested at the hot-wash that we have a table top exercise to demonstrate the proper speed for messaging.

QLOG5 as modified by ECA was used for logging and the net log is Attachment A to this report.

Regional Emergency Management provided lunch which was appreciated by all involved.

The SET Operation Manual and objectives is Attachment B to this report.

Public Safety paging script and amateur paging script is Attachment C to this report.

Safety Briefing is Attachment D to this report.

Attachment A



COMMUNICATIONS LOG				
Event: SET 2021			Operational Period Start:	10/02/2021 08:42
			End:	10/02/2021 11:07
Log				
Date	Time	Station ID		Comments
		Operator	Source	
10/02/21	8:42:21	W0ECA	N0PJX	Checking Into Net
10/02/21	8:42:30	W0ECA	KZ8E	Checking Into Net
10/02/21	8:42:39	W0ECA	WD6EZQ	Checking Into Net
10/02/21	8:42:52	W0ECA	KB3HF	Checking Into Net
10/02/21	8:42:58	W0ECA	N0AQI	Checking Into Net
10/02/21	9:06:01	W0ECA	WOKAH	Checking Into Net
10/02/21	9:06:35	W0ECA	KZ8E	Arrived at assignment
10/02/21	9:07:00	W0ECA	N0PJX	Arrived at assignment
10/02/21	9:07:09	W0ECA	N0AQI	Arrived at assignment
10/02/21	9:07:23	W0ECA	KB3HF	Arrived at assignment
10/02/21	9:07:30	W0ECA	N0PNP	Arrived at assignment
10/02/21	9:25:21	W0ECA	WOKAH	Arrived at assignment
10/02/21	9:54:03	W0ECA	TEAM 2	ENROUTE
10/02/21	9:54:12	W0ECA	TEAM 3	ENROUTE
10/02/21	9:55:11	W0ECA	KB3HF	TEAM 2 KZ8E OR KB3HF TO JUNGERMAN AND MEXICO
10/02/21	9:56:01	W0ECA	WOKAH	TEAM 3 WOKAH WESST CLAY AND EXEC CENTER PKWY
10/02/21	9:56:15	W0ECA	N0AQI	TEAM 4 ENROUTE TO BOSCHERTOWN B & 94
10/02/21	10:07:14	W0ECA	KZ8E	TEAM 2 - AMBULANCE DISTRICT OFFICE OON OLD MILL PKWY ROOF ON PARKING LOT OF BANK.(US BANK)
10/02/21	10:08:15	W0ECA	N0AQI	TEAM 4 - LOCATED SEVERAL; STRIP MALLS AND APARTMENTS HAVE DAMAGE. HWY B IMPASSABLE BY AIRPORT. POWER OUT IN MOST OF THE AREA.
10/02/21	10:09:52	W0ECA	N0PJX	TEAM 2 STRIP MALL AT INTERSECTION OF JUNGERMAN AND OLD MILL PKWY HAS FARM EQMT THROUGH THE WINDOWS FROM FARM STAND ON WEST SIDE OF JUNGERMAN.
10/02/21	10:10:58	W0ECA	N0AQI	TEAM 4 - ST CHARLES COUNTY AIRPORT HAS DAMAGE TO HANGARS AND SOME A/C. TERMINAL BLDG HAS DAMAGE AND POWER DOWN.
10/02/21	10:12:15	W0ECA	N0PJX	HEAVY SMOKE BARBEQUE HAS ROOF DAMAGE AND STANLEY STEAMER BLDG IS SEVERELY DAMAGED. POWER OUT AND WEST CLAY IS BLOCKED.
10/02/21	10:14:22	W0ECA	KZ8E	Team 2 - MOVED TO SPENCER CREEK LIBRARY.
10/02/21	10:14:53	W0ECA	N0AQI	TEAM 4 - MOVING TO FOX HILL DRIVE AND HWY 94
10/02/21	10:16:02	W0ECA	WOKAH	TEAM 3 - CAR THROUGH GLASS OF GIVE IT TO GOD MINISTRY CENTER. USED CAR LOT IN CENTER OF LOOP LEVELED.
10/02/21	10:20:23	W0ECA	WOKAH	TEAM 3 - DAMAGE TO BARNES ST. PETERS. SMOKE COMING OUT AT EXECUTIVE CENTER PKWY SIDE OF BUILDING.
10/02/21	10:20:56	W0ECA	WOKAH	TEAM 3 TO MID RIVERS MALL.
10/02/21	10:22:35	W0ECA	KB3HF	EMERGENCY

Date	Time	Operator	Source	Comments
10/02/21	10:23:53	W0ECA	KZ8E	EMERGENCY DISTURBANCE IN LIBRARY PKNG LOT LAW ENFORCEMENT AND EMS REQUESTED.
10/02/21	10:24:36	W0ECA	KZ8E	EMERGENCY - FIRE IN SPENCER CREEK LIB EAST SIDE. FIRE SUPPRESSION REQD.
10/02/21	10:27:36	W0ECA	KZ8E	TEAM 2 - MOVING EAST ON BOONE HILL - SMELL OF NATURAL GAS.
10/02/21	10:28:56	W0ECA	N0AQI	FOX HILL RD INACCESSIBLE DUE TO TREES AND DEBRIS - FIRE HOUSE HAS MINOR ROOF DAMAGE. POWER OUT UP THE HILL.
10/02/21	10:30:03	W0ECA	KB3HF	TEAM 2 ENROUTE TO NET CONTROL.
10/02/21	10:30:44	W0ECA	N0AQI	TEAM 4 - DUE TO HEAVY RAIN, STORM SEWERS ARE RUNNING OVER AND WATER ON ROAD AT FOX HILL RD.
10/02/21	10:32:49	W0ECA	WOKAH	TEAM 3 - EXEC CENTER PARKWAY BLOCKED AT NURSING HOME. LITTLE DAMAGE TO MENARDS AT SPENCER. REROUTING TO MEXICO TO AVOID BLACKED ROAD.
10/02/21	10:40:38	W0ECA	N0PJX	TEAM 3 - MANY ROAD SIGNS ARE GONE AT INTERSECTION OF SUEMANDY AND TETON ST PETERS POLICE BUILDING DAMAGED.
10/02/21	10:42:04	W0ECA	WOKAH	TEAM 3 - GLASS SKYLIGHTS AT MID RIVERS MALL BROKEN. CARS STREWN OVER PARKING LOT. STREETS LIGTHS ARE OUT AND POWER OS OUT.
10/02/21	10:42:25	W0ECA	WOKAH	TEAM 3 - RETURNING TO NCO.
10/02/21	10:46:36	W0ECA	KZ8E	TEAM 2 - ARRIVED AT NCO
10/02/21	10:52:56	W0ECA	WOKAH	TEAM 3 ETA 15 MINUTES
10/02/21	10:53:08	W0ECA	N0AQI	ETA 5 MINUTES.
10/02/21	10:57:31	W0ECA	N0AQI	GETTING LUNCH - BE THERE IN 30 SEC.
10/02/21	11:07:21	W0ECA	N0PJX	TEAM 3 AT NCO

Attachment B

St. Charles County ARES®
Simulated Emergency Test 2021



Operation "Slight Breeze"

Simulated Emergency Test 2021

Objectives:

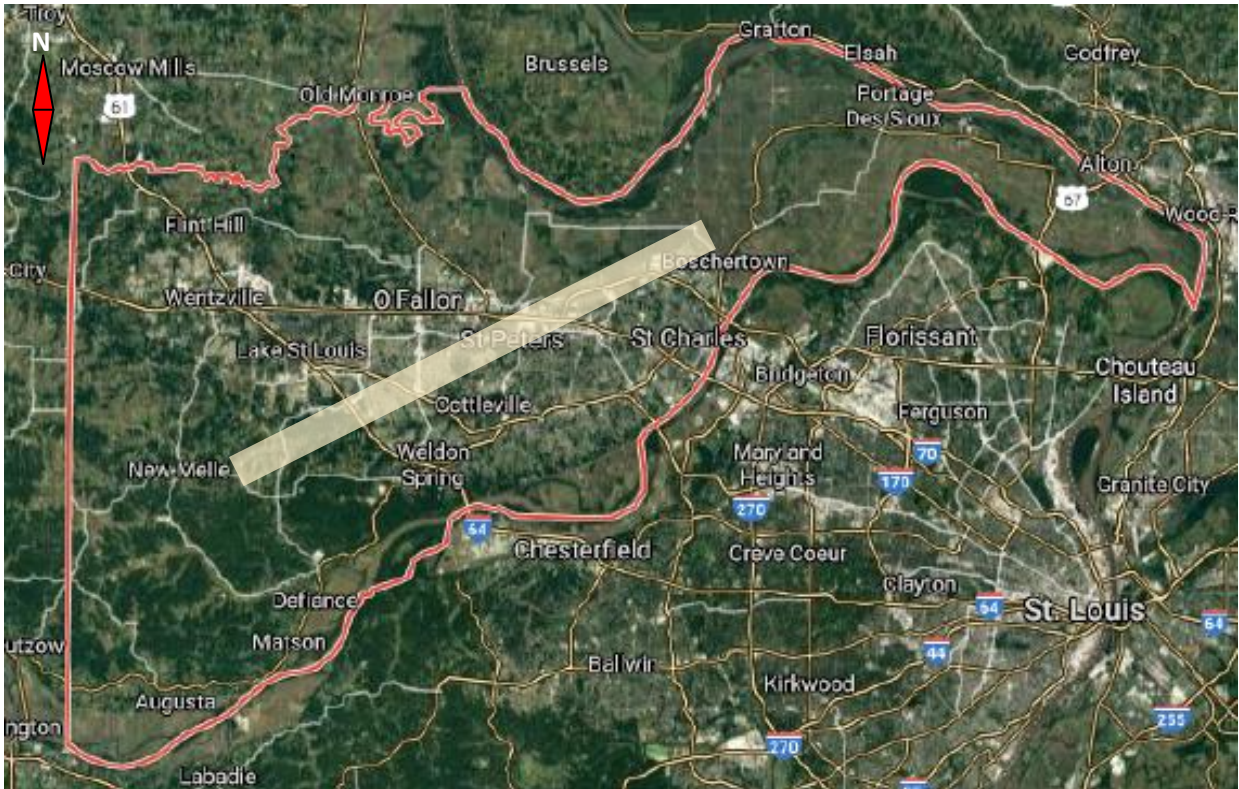
- Accurate tactical messaging
- Set-up and takedown of field base station
- Simplex Net operations
- Understanding of the use of tactical call-signs
- Exercise layout by periods
- Map reading and location finding without visible landmarks

Periods:

- Period 1
 - Set-up of field base
 - Tone out for volunteers
 - Volunteers arrive at staging
 - Exercise briefing
 - Safety briefing
- Period 2
 - Dispatch volunteers to designated locations
 - Pass period 2 traffic
 - NCO move volunteers to secondary location for period 3
- Period 3
 - Volunteers arrive at period 3 locations
 - Pass period 3 traffic
 - NCO return all units to field base
 - Debrief all units
- Period 4
 - Disassemble field base
 - Set up grill and cook burgers and dogs
 - Hot wash
 - Participants go home
 - Exercise closed

Exercise Scenario:

A EF 5 tornado has stricken St. Charles County leaving a path of destruction over a mile wide from New Melle to Boschertown (see attached map). Much of the area has blocked streets and most visible landmarks are gone. ECA is performing windshield damage assessment in the stricken area until damage assessment teams are available to perform formal DA. Net control will be established at a remote location due to damage to radio towers at the County EOC. NCO must employ a means of routing units to locations without the use of visible landmarks and around blocked roads.



Satellite Map of Damaged Area

INCIDENT RADIO COMMUNICATIONS PLAN			Incident Name	Date/Time Prepared	Operational Period Date/Time
			SET 2021		
4. Basic Radio Channel Utilization					
Function	Radio Type/Cache	Group/Channel	Frequency/Tone	Assignment	Remarks
Primary Net	Mobile	HVTAC7	146.595 CSQ	Net Control	
Back-up Net	Mobile	HVTAC6	146.505 CSQ	B/U Net Control	
Field Base Command	Handheld	HUTAC7	446.075 CSQ	Field Base Local	
5. Prepared by (Communications Unit)					
William Grimsbo (N0PNP)					

Communications Plan (ICS-205)

Team 1 to Cottleville at the intersection of Mid-Rivers Mall Drive and Hwy 94 (NN, 22 page 57).

Team 2 to St. Peters at Jungerman and Mexico (II, 17 page 48).

Team 3 to West Clay west of Executive Center Parkway (JJ, 16 page 48).

Team 4 to Boschertown at Hwy B and Hwy 94 (AA, 13 page 35).

Field Base at the County Shed in St. Charles (BB, 16, page 50).

Period 2 Traffic:

Team 1

Msg 1: New Melle Firehouse has structural damage and power is out. There is an odor of natural gas. There are minor injuries and all firefighters were able to vacate the building.

Msg 2: Minor damage to several homes, power is out and one fire hydrant is blowing water due to an automobile hitting the hydrant (no injuries).

Team 2

Msg 1: CVS at the west side of the intersection of Jungerman and Mexico has been flattened. Power lines are down and sparking. There is an odor of natural gas coming from west of the location.

Msg 2: Ambulance District office on Old Mill Pkwy missing roof. The roof debris is in the US Bank parking lot at the east side of Jungerman and Mexico intersection.

Msg 3: The strip mall at the intersection of Jungerman and Old Mill Pkwy appears to have farm equipment through the windows – possibly from the farm stand across Jungerman.

Team 3

Msg 1: Heavy Smoke Barbeque on West Clay has had significant roof damage and the Stanley Steamer building was severely damaged. Power is out and there is arcing power lines across West Clay.

Msg 2: The used car lot on the Executive Center Pkwy loop has been leveled and cars are in the traffic loop. One used car is through the glass of the Give it to God Ministry Center.

Msg 3: There is some damage to Barnes St. Peters Hospital – smoke is coming from a building on the south side of I-70 near Executive Center Parkway but cannot see well from location.

Team 4

Msg 1: St. Charles County Airport has damage to hangars and some aircraft. The terminal building has minor damage and power is down.

Msg 2: Several strip-malls and apartment buildings have minor damage and power is out in most of the area. Hwy B is impassible south of airport.

Period 3

NCO: Team 1 move to Dardenne Prairie City Hall (WW, 19 page 44).

NCO: Team 2 move to Spencer Road Library, on Boone Hill (KK, 17 page 47)

NCO: Team 3 move to Mid Rivers Mall (LL, 16 page 47)

NCO: Team 4 move to Hwy 94 and Fox Hill Drive (BB, 15 page 35)

Team 1

Msg 1: There is a car on the roof of the city hall and severe structural damage to the building with a crack from the base to the roof of the building.

Msg 2: Power is down in most of Dardenne Prairie. Storm sewers are running over from heavy rain due to the storm. SAR may be needed in city hall building.

Msg 3: There is a report of a missing person in the park across the street from City Hall and there is much debris in the park. Law Enforcement and SAR are requested.

Team 2

Msg 1: Power down at Spencer Creek Library and the surrounding homes. There appears to be a disturbance in the library parking lot. Law Enforcement and EMS is requested.

Msg 2: Fire suppression needed at Spencer Creek Library. East portion of the building has visible smoke and flames.

Msg 3: Moving East on Boone Hills, there is a strong smell of natural gas close to the intersection of River Moss Rd.

Team 3

Msg 1: Executive Center Pkwy is blocked at the nursing home – had to reroute to Mexico Rd. to get around the blocked area. There is very little damage to the Menards on Spencer by Mexico and they appear to be running on back-up power.

Msg 2: Many road signs are gone. Intersection of Suemandy and Grand Teton, St. Peters Police building has damage to the glass at the front of the building. There appears to be debris damage to much of the building.

Msg 3: The glass skylights at Mid Rivers Mall are broken due to debris. There are cars blown all over the parking areas. Most of the glass is broken in the various buildings. Power is out and stop lights are not working.

Team 4

Msg 1: The Hardy's on Hwy 94 has minor roof damage. Electricity seems to be working in visible areas. The Boeing buildings have minor debris damage – some broken windows.

Msg 2: Fox Hill Road is mostly inaccessible due to trees down over the road and significant debris in the road. Power is out up the hill and the fire house has minor roof damage.

Msg 3: Due to heavy rain, the storm sewers are running over and Hwy 94 has several inches of water over the road by Fox Hill Road.

Period 4

Net Control calls all teams back to staging.

Disassemble Field Command Center.

Hot Wash and lunch.

Attachment C

Public Safety Paging Script:

This is unit _____ calling all volunteers for Simulated Emergency Test 2021, all volunteers are requested to check in on the 145.490 MHz repeater. This will be a field exercise and staging will be at the County shed on Lindenwood off of Randolph in North St. Charles city. Again, please check in on the 145.490 MHz repeater. _____ clear.

Amateur Paging Script:

Calling the St. Charles County ARES net. This net is called in support of Simulated Emergency Test 2021. This is net control _____ Stations checking in are requested to give their name, call sign and availability to support the SET 2021 exercise. This will be a field exercise and staging will be at the County shed on Lindenwood off of Randolph in North St. Charles city. Give your information slowly to aid net control in logging. Please check in now.

Attachment D

Safety Briefing – SET 2021 “Operation Slight Breeze”

Field Base:

Be observant of overhead power lines when erecting antennas.

Be observant of foot traffic in the area and plan accordingly.

If weather is adverse, antenna structures may need to be disassembled or at least the feed-line disconnected and clear of areas with people.

If ladders are used, ensure one person is available to stabilize the ladder and the other to perform the task on the ladder.

Ensure tools are all picked up and put away after each operation (construction or dis-assembly).

Field Teams:

Obey all traffic laws.

Do not trespass on private property

If there is an accident or safety-related event, inform Net Control immediately and stop all exercise-related activities.

If parking – find a safe location to pull off the road and park – avoid parking on the shoulder of the road if possible.

ALL TRAFFIC IS SIMULATED DRILL TRAFFIC – ALWAYS FOLLOW TRAFFIC PASSED WITH **“THIS IS DRILL TRAFFIC.”**