

Exercise Instructions ALERTEX 2018-C

15-18 August 2018

WHAT IS IT?

ALERTEX 2018-B is the third of four REACT International quarterly communications exercises to be conducted in 2018 by the REACT Training Committee. It is an Internet based exercise. No actual movement of people and resources or radio transmissions are required.

QUESTIONS

Questions about the exercise should be directed to Walter Green, Chair of the REACT Training Committee at training@reactintl.org.

EXERCISE OBJECTIVES

- To determine REACT International's capability to sustain communications operations in a major power and communications outage.
- To familiarize REACT Teams with the threat posed by cyber-attacks on communications and power systems

BACKGROUND

We face an increasing threat of criminal, terrorist, or other nation attacks on transportation, infrastructure control, power generation and distribution, flood control, communications, Internet, and computer systems. These may be narrowly targeted attacks including ransomware and denial of service attacks on computer systems, attacks on physical infrastructure to disrupt or block services, or attacks designed to result in large scale physical damage. This poses a direct threat to the security of virtually every nation. There have been multiple attacks on the United States and its political subdivisions, including state and local governments. There is general agreement that (1) we have not seen the full potential of such acts, (2) that there is every reason to expect more and bigger events, and (3) that the United States and other countries with REACT Teams are not prepared to prevent or completely protect our nations from such attacks.

MASTER SCENARIO

Global cyber attacks on electric power generating and transmission stations, on communications systems, on specific Internet sites, and on the Internet itself cause widespread disruption, damage, and destruction from a variety of direct and indirect impacts. All impacts for the exercise are based on actual previous terrorist, criminal, and other country use of computer based attacks.

MASTER SEQUENCE OF EVENTS LIST

The following is the detailed list of events, with actions participating teams take and the URL of the website form used to file the report.

Wednesday 15 August

Event 1 – 1600 EST STARTEX – REACT Warning Team sends on ICS 213 message to all Teams with initial information on sporadic outages possibly caused by denial of service attacks or penetration of control systems – no action required but we recommend Teams review their emergency plan and simulate taking the actions it or other standard operating procedures direct at this stage of the event assuming that their capabilities may be needed locally to support local supported organizations.

Thursday 16 August

Event 2 – 0900 EDT - REACT Warning Team sends one ICS 213 message to all Teams with updated information on outages and suggested alert level.

Event 3 – 1400 EDT – REACT Warning Team sends one ICS_213 message to all Teams with updated information on outages and our assessment of the developing event.

Friday 17 August

Event 4 – 0900 EDT – REACT Warning Team sends a REACT specific request to all Teams asking for current communications capability and length of time operations without commercial power are possible. Teams may reply by e-mail to watch.officer@reactwarning.org or fax to 1-804-264-0633. See the **Capability Report Form** at the end of these instructions.

Event 5 – 2400 EDT – Total communications failure of telephone and Internet based communications. Total power outage in the United States and bordering areas of Canada.

Saturday 18 August

Event 6 – 1400 EDT – REACT Traffic System Net activated on Zello channel REACT/Traffic System. All other wide area telephone and e-mail communications systems remain out. Teams report whether they have (1) local telephone service and (2) electric power by voice over the net using the spot report format in these instructions.

Event 7 – 1700 EDT – ENDEX. Warning Team generates daily SITREP to Regional Directors and REACT International.

ZELLO

This exercise will make use of the REACT/Traffic System Net on Zello. This is a directed net. Please listen. If you hear no activity, call Net Control with your Team Name. If you hear activity, wait and call Net Control when there is a break in the activity. Follow Net Control's direction. You may hear Amateur Radio call signs on the net. These are Radio Relay International stations that will be picking up messages from our net and relaying them on to simulated agencies involved in managing the response to the attack. If you are a REACT amateur operator do not use your Amateur call sign so that we can accurately track which Teams participate. If you need to leave the net ask for Net Control's permission.

To download the Zello application (this is for a desk top or lap top installation – Zello can be installed and used on a smart cellular telephone or network radio following a similar procedure):

REQUIRED EQUIPMENT

- Internet access
- Good quality headset with microphone
- Do not use a dongle headset

DOWNLOAD ZELLO AND INSTALL

- Go to <http://www.zello.com>
- Click on the FREE DOWNLOAD and follow the instructions
- Set your Traffic call sign in uppercase as your user name, for example REACT TRAFFIC 241
- Write down your user name and password in a safe place

Downloading installs a Zello icon on your desktop – this is the operational access to Zello.
Open Zello icon

- A small control panel will be displayed
- In the pull downs at the top, select TOOLS
- Select ADD CHANNEL
- In the channel box type: REACT/Traffic System
- From the displayed list, click on REACT/Traffic System
- Review channel details to make sure correct channel
- Click NEXT to install channel in your selections

TO TRANSMIT AND LISTEN

- Set audio control on your computer display (speaker symbol in the lower right) to the on position

- Open the Zello icon on the desk top
- On small control panel in lower left click on small circular icon in orange or green - select Headphones.
- Click on REACT/Traffic System icon – bar color changes - you are in the net
- On bar with two vertical buttons and a lock symbol, click on left hand button to transmit – button turns red and red waves appear in the selected channel bar (NOTE: standard is to use push to talk, not voice activated)
- Release after transmission
- When another station is transmitting green waves will appear in the selected channel bar

TESTING

To test if voice transmission is working:

- Select ECHO channel
- Transmit – red waves indicates transmission
- Listen – green waves indicate message retransmission by Zello – if heard transmission and reception is normal

CLOSING STATION

- Transmit (CALL SIGN) closing station
- Click headphone button to offline

EXERCISE IDENTIFICATION

All messages originating in the REACT Traffic System will be identified as exercise messages with the following header and footer preceding and following the radiogram.

TIME COMMITMENT

Teams do not have to continuously monitor e-mail during this exercise. Messages will be sent at the times indicated. To adjust times for each event to your local time:

Atlantic Daylight Time	add one hour
Eastern Daylight Time	the time used in these instructions
Central Daylight Time	subtract one hour
Mountain Daylight Time	subtract two hours
Pacific Daylight Time	subtract three hours
Hawaii Standard Time	subtract six hours

CAPABILITY REPORT FORM

Attached to this set of instructions is a capability report form. Please complete it as accurately as possible to reflect the actual resources of your team. The form can be passed by fax to 1-804-264-0633 or by e-mail to watch.officer@reactwarning.org by listing the paragraph numbers and information. If e-mail, only list the lines for which you have answered that you have capability.

It is very important that we receive this information. Our REACT Incident Management Team will use this data later in the next week to participate in the global EARTH EX dark sky cyberattack exercise.

SPOT REPORT FORMAT

Spot reports provide ground truth information from our Teams to assist in assessing needs, allocating resources, and managing communications.

Write out a radiogram message in the format below. When you transmit on Zello speak slowly and distinctly. At the BREAKs wait to give other stations a chance to ask for a repeat of any information not heard.

If you are unsure of how to do this, check in to the net and indicate you have traffic but are unsure of the format. Net Control will ask any needed questions to guide you through the process. The key is to get the information sent. In an actual event we would be reporting this information through amateur radio circuits to state and national organizations for damage and current status assessment.

EXERCISE MESSAGE

Your message number ...

TEST EMERGENCY ...

Your Team name and number ...

Number of words in the text ...

Your city and state ...

Your time in 24 hour clock code with local time zone ...

Month and day

BREAK

REACT Warning Team

BREAK

SPOT REPORT followed by the text of the spot report – no punctuation except XRAY for periods – write telegraphically. For this exercise your spot report should include two key items – do you have electric power and do you have local telephone service? Feel free to report you have one or the other or both or neither.

BREAK

Your name

EXERCISE MESSAGE END AND NO MORE

VOLUNTEER TIME

We will separately ask each Team that participates to report the volunteer time worked. Report actual volunteer time actually worked on the exercise. Volunteer time is valuable. Each year various agencies at the state and national level compute the value of volunteer time. The standard United States value (states may establish a state value) of volunteer time for 2017 (the current value) is \$24.14 per hour. This is important in disaster response because states may use the value of volunteer time as part of the funding for their share of disaster costs. It is very important that we be able to provide volunteer time figures. Please add the time spent by each member of your team and report the total when asked.

REACT COMMUNICATIONS CAPABILITY REPORT

TEAM

CHARTER No.

DATE OF REPORT

Line No.	Radio Service	Number	Time operations can be sustained with no power
1	Citizens Band – Base stations		
2	Citizens Band – Mobile		
3	General Mobile Radio Service – Simplex		
4	General Mobile Radio Service – Duplex		
5	Access to General Mobile Radio Service Repeater	Yes or No	
6	Amateur Radio 2 Meter – Base or Mobile		
7	Amateur Radio 2 Meter – Handheld		
8	Access to Amateur Radio 2 Meter Repeater	Yes or No	
9	Amateur Radio High Frequency – give Call Sign and Bands		
10	Amateur Radio Packet Radio – give call sign and routing	Yes or No	
10	Winlink capable – give Call Sign/e-mail address	Yes or No	
11	Family Radio Service		
12	Other		