

EXERCISE OPERATION TSUNAMI
27 January 2018
HOT WASH

We received a limited number of comments by participants in the January Virginia Auxiliary Communications exercise Operation Tsunami. The following is a synopsis of the comments, background information, and the actions the Training Committee will take to address them.

1. Equipment: Equipment should be checked and operators familiarized with it prior to the exercise.

This is a very important point that requires regular emphasis. Two participants had cables for headsets chewed through by pets prior to the exercise. There are any number of ways that equipment can fail, and, depending on replacement or repair time, regular checks of all equipment can prevent disruption of a station's ability to operate.

ACTION 2018-1 – The Training Committee will update the Field Operations Guide for the Traffic System to include a pre-event checklist.

In one case an operator accidentally activated the voice button on the Zello control menu, resulting in the broadcast of extraneous information during the event. Because of the background noise of other members talking, the operator did not hear Net Control advising of the problem. The transmissions were only stopped by a telephone call.

ACTION 2018-2 – The Training Committee will establish a standard of only using push-to-talk activation of Zello and include information in the Field Operations Guide.

ACTION 2018-3 – Because Team stations are now being incorporated in exercises on Traffic or Command nets, the Field Operations Guide will be distributed to active Teams.

2. Operator Technique: Net Control Station transmission were overmodulated.

Net Control was using a new headset and microphone, and the microphone boom was positioned too close to the mouth. There is wide variation in headset performance with Zello, and the Zello Echo test does not necessarily alert operators to issues of transmission quality. Operators should not hesitate to provide feedback to other stations when transmission quality is an issue.

ACTION 2018-4 – The Training Committee will include information on transmission strength and quality reporting in the Field Operations Guide.

3. Participation:

- a. Only a limited number of Traffic System Stations and participating Teams were actively engaged with the net.

We had five stations checked in to the net during the exercise, two of which were on for a limited period. In any exercise, there will be work, family, training, etc. conflicts that limit participation. And in the case of this exercise, only a limited number of Teams who had previous experience in ALERTEX 2017 were asked to participate. However, participation in communications exercises is critical to developing emergency communications competency. Members and Teams should be encouraged to participate fully whenever possible.

ACTION 2018-5 – The Training Committee should request the support of Regional Directors and State Councils in promoting our exercise program.

- b. Make allowances for delays in participants' response to messages.

When we design exercises we manage the flow of inputs and tasks so that there is more time than might be available in an actual event for several reasons. We do not have paid staff, all of us are volunteers, some have more time than others. Our exercise program is the first time REACT has ever attempted to run exercises across time zones and even internationally. We allow more time for tasks simply because it is a training environment. For example, in ALERTEX 2017 Teams had a full day to respond to a single message. In ALERTEX 2018-A the busiest day has Teams submitting two messages.

4. Message Formats:

- a. We should make sure that everyone has the same forms, especially as some of our ICS 213 message forms are different from the standard ICS 213 format.

It is important to understand that our use of ICS 213 General Message forms is intended to be primarily by entry through the form templates located on the REACT Warning Team's website. These templates are designed to be filled in (for text boxes), selected (for alternatives with radio buttons), or checked, and when complete to be submitted. The resulting submission goes to the watch officer who processes it and dispatches it as an e-mail, fax, or by digital radio. The person to whom the form is addressed receives a message with the block number, what type of information the block contains, and the actual information. We only operate by block numbers without the information on the name of the block between Traffic Stations who have a standard explanation of all active forms in the Field Operations Guide.

It is also important to understand that there is considerable variance in ICS 213 forms. Some of this is consistent with FEMA's directions for use of the form as ours is and looks like an ICS 213, some of it is consistent with FEMA's guidance and looks like something very different from an ICS 213 (see for example the ICS 213RR by the FDA), some looks like the standard ICS 213 but has no block numbers, some is a standard ICS 213 with Amateur radio handling instructions grafted on, etc.

ACTION 2018-6 – The Training Committee should extract the outlines of REACT ICS 213 templates and publish them with copies to all Teams.

- b. Specify how the individual parts of the message are separated.

This is already being done. All radiograms being sent now come with a header that identifies them as radiograms and a footer that shows the intent of each individual part of the message. Our practice is to type radiograms being sent by e-mail from right to left with a slash between components. All ICS 213 messages come with a similar header, the text with each block numbered and starting on a separate line, and the blocks arranged vertically as they would be on the form.

- c. What is the format for telephone numbers?

Phone numbers are passed by voice as “phone group figures 321 figures 456 figures 7890” and are written on radiogram message forms as 321 456 7890. The word “figures” or “figure group” effectively tells the person copying the message that the area code, then exchange, then subscriber number is coming, separated from the others. This eliminates having to use dashes which some traffic systems count as individual words against the overall message count. In using an ICS 213 transmitted by e-mail, fax, or digital radio the dash can be inserted.

- d. We should precede and end each message with EXERCISE to avoid confusion.

There are three parts to this. First, in the radiogram message we are constrained by need to have the message conform to message standards in the Amateur traffic systems. A radiogram message is identified as an exercise message in two ways, ways that we conform to. The precedence is listed with a T for “test” (as in simulated emergency test) before the R, P, W, or Emergency, and the word “exercise” (which we use), “drill,” or “test” is included at the start of the message text and at the end.

Second, the ICS 213 no place except the text in Block 7 to indicate that the message is an exercise message. It could be included in Block 1, Incident Name, and we can do so, but it is important to remember that Block 1 is an optional block, and could easily be stripped off at some point in the processing and delivery of the message by other agencies.

But the header and footer do provide a place where this can be added when we transmit a message by e-mail. The danger is that the header and footer now is starting to approximate the size of an actual message, increasing the probability that they will be ignored by the recipient.

ACTION 2018-7 – The Training Committee will add guidance to the Field Operations Guide for indicating to the maximum degree possible that an exercise message is an exercise message.

5. Pre-exercise communications practice, including the software, including version, to use, the latest message forms, and on the air practice might be helpful prior to an upcoming COMMEX.

Current exercises are being conducted by e-mail deliberately to allow much of this information to be distributed ahead of time in the Exercise Instructions. They are supported by an increasing number of REACT training courses available online (including Introduction to Net Operations, Messages – the Radiogram, and an equivalent course on the use of the ICS 213 General Message due out this week). We expect to continue running e-mail only exercises through 2018. However, we already have three layers of on-air practice opportunities for those members who wish to improve their skills. First, there are two Zello (open to any member) and one Echolink (open to Amateur Radio license holders) nets that are run by members and that provide entry level opportunities to experience typical nets similar to those run on Amateur Radio. Second, the Training Committee operates the REACT Traffic System Net on Zello weekly, specifically to train members on formal message traffic and disciplined emergency net procedures. Third, we operate monthly qualifying message runs for members to validate their skills in achieving 100% good copy at various transmission speeds. These are publicized each month in *The REACTer*.

ACTION 2018-8 – The Training Committee should continue to promote participation in pre-exercise training, supported by the Regional Directors, the Councils’ leadership, and Team officers.

6. Significant outcomes:

a. Comments by members:

(1) “My only observation is relative to message 1 on Zello. The speed was a little quick for me to copy to paper. Naturally I have not copied NTS traffic in 15 years, so I am certainly rusty. I have to applaud your consistency, timing and brevity of the traffic sent.”

(2) “... the exercise sounded and went off very professionally ... We look forward to the next exercise.”

(3) “I recommend that an exercise of this nature be scheduled perhaps 3X/4X yearly if possible, with participant comments solicited, evaluated, and, if accepted, applied to the next exercise.”

(4) “As far as the REACT Traffic System was concerned, everything moved smoothly in my opinion. Our net started on time, was properly controlled for the full 6 hours, sent its messages out like clockwork, updated the bulletin board almost immediately, and relayed all response messages to those who were logged in. I also was very impressed by the documentation that was sent out before and during the event via email – incident report, etc. I learned a lot from them.”

(5) “I thoroughly enjoyed the experience, because it gave me a chance to pull together a lot of the information I have been learning about in REACT Training courses. I’ve also learned that the wait is part of the experience, and that I can make a difference by sticking it out and patiently waiting for any message that comes through.”

b. Other operational outcomes:

(1) We demonstrated that we can operate as an integrated system using e-mail and Zello with an Amateur Radio response coordinated through WINLINK.

(2) We were able to think through deployment information needs, design and test an ICS 213 Mission Request, and identify questions that we need to ask if REACT International, Regional Directors, Councils, or Teams are asked to deploy resources outside their local area.

(3) We established and practiced a protocol for rapid transfer of net control from one station to another to seamlessly maintain control of a traffic net.

(4) We established a model for integrating Teams into Traffic or Command nets using a single operator and the Team name as call sign.

(5) The slow pace of the exercise over 6 hours was realistic in terms of a major disaster event. This highlights the need to think about how we staff and maintain communications functions for multiple days with a volunteer membership.

(6) We successfully generated and distributed part of an Incident Action Plan (ICS 201 and ICS 205) to participating REACT units.

(7) The complete lack of information flow on the scenario during the exercise highlighted the importance of our being prepared to run a disaster intelligence cell to gather information from multiple sources, put it together in one product, and get it out to our Teams. This is not a substitute for the official word, and should never be disseminated to others, but the official word may never get to us if we do not go looking for it.

(8) Early alerting and warning is important when a major event appears to be developing. We started the run-up to operations the night before at the point where we could have learned of the simulated Cumbre Vieja collapse. That allowed us to have key actions prepared for STARTEX. If we had waited to do those at STARTEX, we may not have been able to have accomplished as much in the exercise as we did.

Walter G. Green III
Chair, Training Committee

TABLE OF EXERCISE RELATED ACTION ITEMS

Number	For	Action	Status
2017-1	Training Committee	Publish and distribute list of recommended training	Training for typing published.
2017-2	Regional Directors Teams	Promote REACT and other agency training	
2017-3	Training Committee	Develop recognition for completion of training milestones	In work – will include positional qualification and possible professional certification
2017-4	Training Committee	Develop training on typed resources and establish list of credentialed resources	Training for typing published.
2017-5	Training Committee	Publish annual exercise calendar	Months for ALERTEX 2018 series published
2017-6	Training Committee	Develop training on execution of emergency plans	Brief version included in ALERTEX 2018-A instructions. Scheduled for a course.
2017-7	Teams	Report 0s under Typed Resources if unable or unwilling to respond to future disasters	
2017-8	Training Committee	Develop training in the basics of drills and exercises	COMPLETE - published and available on the REACT website
2017-9	Training Committee	Search for and make information available on-line and field exercise opportunities in which REACT Teams can participate.	Operation Tsunami 2018 complete, Great Shake Out 2018, and the 2018 series of Formidable Footprint exercises starting in January on list.
2017-10	Training Committee	Include instructions on checking junk mail folders in exercise information	
2017-11	Teams	Check the REACT Team list online to ensure that the Team's e-mail address is correct	
2017-12	Training Committee	Obtain funding for an upgraded e-mail mass messaging system	COMPLETE – funding not required

2017-13	Training Committee	Publish REACT course on messages	First course on radiogram published. Second course on ICS 213 in draft.
2017-14	REACT Warning Team 6247	Temporarily include brief explanation of elements of radiograms in e-mail messages sent	COMPLETE
2017-15	REACT Warning Team 6247 Training Committee	Design and train on use of preformatted ICS 213 messages	3 forms operational, others in work, included in Field Operations Guide and in course in draft
2017-16	Board	Formal tasking to the Training Committee for quarterly online exercises. Task REACT Warning Team 6247 to provide the facilities to conduct exercise. Promote participation among Teams.	Board approval of annual training report.
2018-1	Training Committee	Update Traffic System Field Operations Guide to include pre-event checklist	
2018-2	Training Committee	Include a standard of only using push-to-talk activation of Zello in the Field Operations Guide	
2018-3	Training Committee	Distribute Field Operations Guide to active teams	
2018-4	Training Committee	Include information on transmission strength and quality reporting in the Field Operations Guide	
2018-5	Training Committee	Request the support of Regional Directors and State Councils in promoting our exercise program.	
2018-6	Training Committee	Extract the outlines of REACT ICS 213 templates and publish them with copies to all Teams.	
2018-7	Training Committee	Add guidance to the Field Operations Guide on using maximum means to identify exercise messages as exercise	
2018-8	Training Committee Regional Directors Councils Teams	Promote participation in pre-exercise training (courses, nets, qualifying runs, etc.)	