

## July 2021

# Contingency Mode - Primary and Secondary Repeater Failure

Throughout the remainder of this document, The *Pinellas County ACS/ARES® Emergency Communications Plan and Standard Operating Procedure* document will be referred to as the Communications Plan.

### Description

The ACS/ARES® Tactical-Resource Net will be established at **ACTIVATION LEVEL 1** using the primary ACS repeater system, W4ACS. Once the net is established, the drill will begin. The three phases of the drill are listed below.

- Phase 1: Simulate a failure of the W4ACS Primary Repeater System. Then transition to the WD4SCD back-up repeater system.
- Phase 2: Simulate a failure of the WD4SCD Back-up Repeater System. Then, transition to a county wide simplex net.
- Phase 3: Return to the W4ACS repeater system for closing remarks and net deactivation.

The procedures documented in the Communications Plan will be used to activate, transition, and deactivate the net.

### Objectives

This drill has three objectives.

- Provide training to the membership on contingency mode operation.
- Evaluate the Net Activation and Deactivation procedures documented in the Communications Plan.
- Evaluate the contingency mode procedure documented in the Communication Plan.

## Procedure

The following procedure will be used to conduct the drill.

## BEGIN DRILL

1. The NCS will activate the ACS/ARES® Tactical-Resource Net using the procedure for **ACTIVATION LEVEL 1** that is documented in Appendix D of the Communications Plan. The NCS will clearly state that the reason for the activation is a **TRAINING DRILL**.
2. Once the NCS has completed the Net Check-in phase, the NCS will announce the following information to the Net:

*“Tonight’s Training drill is divided into three phases:*

*During Phase one, the net will simulate a failure of our primary, W4ACS, repeater system. When this failure is announced, the net will transition to our back-up repeater, the WD4SCD system. Once the net is re-established on the backup repeater, the drill will transition to phase two.*

*Phase two of the drill the net will simulate a failure of the back-up WD4SCD repeater system. When this failure is announced, the net will transition to a county wide simplex net. Once the county wide simplex net has been established, the drill will transition to phase three.*

*During phase 3, the net will transition back to the W4ACS repeater system for closing remarks and net deactivation.*

*As a reminder, during this drill, we are simulating the failure of a repeater system. Once a repeater failure has been announced, no one should transmit on the input frequency of the failed repeater.*

*Are there any questions before we transition to phase 1 of the drill?*

**Pause for questions**

*I will now commence phase 1 of the drill.”*

3. The NCS will pause for 1 minute and then announce on the W4ACS output frequency that a repeater failure has taken place and that the ACS/ARES® Tactical-Resource net is moving to the WD4SCD back-up repeater system.

*“This is WA1RYQ the NCS for the Pinellas ACS Tactical-Resource Net. Due to a failure of the W4ACS repeater, the Pinellas ACS Tactical-Resource net will now transition to the WD4SCD repeater system. I say again...”*

*This is WA1RYQ Out.”*

4. The NCS, Alternate NCS, and net membership should transition to the alternate repeater in accordance with the procedure documented in paragraph 6.4.1 (Tactical-Resource Net Repeater System Failure) of the Communications plan.
5. Once the NCS has completed the Roll call phase on the WD4SCD repeater, the NCS will announce the following information to the Net:

*“The net has now completed phase 1 of the drill and will shortly transition to phase 2, a simulated failure of the back-up repeater, the WD4SCD system. During this phase of the drill the net will transition to a county wide simplex net. Once the net transitions to simplex mode, the NCS, the ANCS, and individual stations may have difficulty hearing stations. Please be patient and listen carefully for other net participants before keying up. First the NCS will call for check-ins and log those stations that he can hear directly. Once this step is complete, the NCS will request a north county station on his list of check-ins to act as a relay and request net check-ins. Once the north*

*county relay station has completed his call for check-ins, he will provide the NCS with a list of stations he was able to hear. This process will then be repeated for a south county relay.*

*Once a county wide simplex net has been established, the net will transition to phase three.*

*During phase 3, the net will transition back to the W4ACS repeater system for closing remarks and net deactivation.*

*Are there any questions before we transition to phase 2 of the drill?"*

**Pause for questions**

*"I will now commence phase 2 of the drill."*

6. The NCS will pause for 1 minute and then announce on the WD4SCD output frequency that a repeater failure has taken place and that the ACS/ARES® Tactical-Resource net is now operating in simplex mode on a frequency of 146.430.

*"This is WA1RYQ the NCS for the Pinellas ACS Tactical-Resource Net. Due to a failure of the WD4SCD repeater, the Pinellas ACS Tactical-Resource net will now transition to simplex mode on a frequency of 146.430. I say again..."*

*"This is WA1RYQ Out."*

7. The NCS, Alternate NCS, and net membership should transition to the Plan A Simplex frequency in accordance with the procedure documented in paragraph 6.4.3 (County Wide Simplex Operation) of the Communications plan.
8. Once the NCS has completed the Net Check-in phase, the NCS will announce the following information to the Net:

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“The net has now completed phase two of the drill. All net participants are requested to transition back to the W4ACS repeater system for closing remarks and net deactivation. North and south relay stations please remain on frequency.”

9. The NCS will that the North Relay station repeat the announcement. Once complete, the NCS will request that the South Relay Station repeat the announcement. Once each relay station has announced that the net is moving back to the W4ACS repeater, the NCS should request that the relay stations QSY.
10. The NCS, ANCS and net membership will transition to the primary W4ACS repeater system. The NCS will then make the following announcement.

*“I would like to thank everyone for participating in tonight’s Drill. Everyone is strongly encouraged to send comments, suggestions, and recommendations to the Training Officer via email. My email is WA1RYQ@ARRL.net. I will compile the responses and report them to the membership during the next regularly scheduled ACS weekly training net which is on Tuesday July 22<sup>nd</sup>. I will also post the information on the PCACS web site. If we uncovered any issues with the Communications Plan, changes to the plan will also be addressed and an updated version posted to the website. Before I close the net, do I have any comments or questions?”*

**Pause for questions**

11. Following the ACS Training Officer Announcement, the NCS will send a Net Report Message to the net manager.

12. After sending the message, the NCS will Deactivate the ACS/ARES® Tactical-Resource Net in accordance with the procedure documented in Appendix D of the Communications plan.

## **END DRILL**

### **Schedule**

July 22nd, 2021 @ 1930 Hrs. Drill duration is scheduled for approximately 1 hour.

### **Resources**

The W4ACS and WD4SCD Repeater systems.

Net Control Station: **WA1RYQ**

Alternate Net Control Station: **W8QFV**

### **After-Action Report and Activities**

The NCS will provide a copy of the NCS log to the training officer.

Drill participants are encouraged to send comments, suggestions, and recommendations to the Training Officer via email. The Training Officer will compile the responses, report them to the membership during the next regularly scheduled ACS weekly training net, and post the information on the PCACS web site.

The Communications Plan will be updated to incorporate changes if required.

## A.1 NET PARTICIPANT PROCEDURES

When notified by the EC/RO or his/her designee that ACS/ARES® Activation Level 1, 2, or 3 has been established, the general membership will perform the following actions.

- a. Monitor the appropriate repeater system or simplex frequency.
- b. During net establishment and reestablishment, the NCS will call for check-ins based on call sign prefix. When your prefix is called, check-in with the following information.
  - (1) FCC Call Sign
  - (2) Tactical Call Sign (if applicable)
  - (3) Deployment status (e.g., Currently deployed, available for deployment, not available for deployment.)
  - (4) Traffic List (e.g., no traffic, priority traffic, etc.)

**EXAMPLES:** (1) “THIS IS (release PTT and pause for 2 seconds) WHISKEY ALPHA ONE ROMEO YANKEE QUEBEC, TACTICAL CALL SIGN IS BOCA CIEGA HIGH, CURRENTLY DEPLOYED, NO TRAFFIC, OVER”.

(2) “THIS IS (release PTT and pause for 2 seconds) WHISKEY ALPHA ONE ROMEO YANKEE QUEBEC, AVAILABLE FOR DEPLOYMENT, ONE PRIORITY, OVER”.

- c. Monitor and copy all bulletins and message traffic passed by the net so that your station can assist with relays if requested to do so by the NCS.
- d. Remain on frequency until release by net control.
- e. If you must leave the net, wait for a break in traffic, call net control, and request authorization to leave the net.
- f. Continue to monitor local news outlets for updated information.

## Questions and Comments.

The following table contains a summary of the comments and questions provided by the membership.

No.	Call Sign	Comments	Response
1	WR6N	Script for Activation Level 1 did not include a call for Echolink stations. What was the rationale for excluding Echolink stations?	I originally excluded Echolink from the communication plan because I assumed that the internet would probably not be available during an activation event. In hindsight, that was probably a bad decision. During an activation event, ACS should make use of any communications channel that is available... until it is not. Therefore, I will update the plan to include Echolink.
2	KM4DYD KJ4FXX WR6N	During countywide simplex operation, I was unable to hear net control. I was able to hear a few other stations, but never heard anyone call for check-ins.	Agree we need work on simplex operations. I will update the script so that the net control formally designates a north and south relay station and that the relay stations in turn are required to call for net check-ins.  Refer to next response.



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No.	Call Sign	Comments	Response
3.	KJ4FXX	It might be better to assign an NCS that is at a higher elevation when running simplex nets.	<p>No matter where the NCS is located, when operating in simplex mode, the net will always need to support members who can not hear or be heard by the NCS. The issues encountered during the Drill can largely be resolved by improving the procedures used during simplex operations.</p> <ol style="list-style-type: none"> <li>1. The NCS should clearly designate North and South Relay Stations.</li> <li>2. North and South Relay stations call for Net Check-ins.</li> <li>3. North and South Relay stations call for Relays</li> <li>4. NCS ask North and South Relays to rebroadcast all announcements.</li> </ol> <p>Although an NCS on high ground will reduce the number of stations that cannot hear or be heard by the NCS, location along will not eliminate the problems seen during the drill.</p> <p>The Communications plan will be updated accordingly.</p>
4	KJ4FXX	When in simplex mode each station should log the stations that they can clearly hear near them and then forward that information to the NCU.	Refer to previous response.
5	KJ4FXX	Recommendation for a future drill. Set-up a cross band repeater for contingency mode operation.	Excellent idea. I'll put it on the list.

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No.	Call Sign	Comments	Response
6	KJ4FXX	During operation on the WD4SCD system, it would be a good idea for each station to identify the receive site they using to enter the net.	<p>During periods of normal operation, each member should determine the WD4SCD receive sites that they are able to communicate with. During an activation event, it's possible that one or more of these receive sites may become inoperative and members may need to select an alternate receive site to remain in the net.</p> <p>I would recommend that stations notify the NCS when they encounter a problem with a receive site. The NCS could than maintain and announce a list of receive sites that must be avoided.</p>
7	KC4SXO	Net participants need to follow scripts and procedures more closely.	<p>I noticed a few areas where participants could better follow scripts and procedures.</p> <ol style="list-style-type: none"> <li>1. The NCS requested specific information during the call for net check-ins. In general, requested information was not provided.</li> <li>2. When switching to the alternate repeater, participants began calling for net control before net control was on frequency.</li> </ol>
8	KC4SXO	In the future, could the training officer provide more information in the Drill plan posted on the Web site.	The drill plan for July has been updated with additional information so that users can evaluate the contend and determine if the updated format is sufficient.

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No.	Call Sign	Comments	Response
9	WA1RYQ	Not all operators used the standard phonetic alphabet during net check-ins.	The use of non-standard phonetics can cause confusion during net operations and during voice message exchanges.